



Telco/ISP
IPTV/OTT
SmartHome
IoT/SmartCity
Hospitality
Digital Signage
Smart Mobility

Product Catalogue 2022

IPTV / Digital TV Headend / Streaming Platform / Middleware
Set-top Boxes / Monitoring / Smart Apps

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About ANTİK Technology



FORBES
INNOVATIVE COMPANY
OF THE YEAR 2018

ANTİK Technology develops SmartCity, SmartMobility, End-to-End IPTV / OTT Solutions and Internet of Things platforms for operators, content providers, retailers, municipalities and governments. It is one of the few global companies with own hardware and software products for complete IPTV ecosystem from acquisition, transcoding, streaming, management, monitoring, protection to middleware and end-user devices. Our current position on global market benefits from more than 20 years of experience in the area of video processing.

ANTİK's IPTV products are supported by the team of more than 300 employees. Software development team and technical support are based in Slovak Republic (European Union) and Singapore, hardware development team in Czech Republic (EU), logistics and HW manufacturing in Shenzhen, China and customer support covering Asia, Middle East, Europe, Africa, North and South America from local offices.

Nowadays our reference clients are spread over the world, using our 4K set-top boxes with state-of-art middleware and smartTV apps both in closed multicast networks and on public internet, streaming thousands of live, VOD or archived TV channels to endusers located elsewhere with low-cost Antik HLS Media Streaming Solution protected by KeyRider DRM. We deliver fully customized End-2-End hospitality IPTV to residential projects and hotels in most visited global touristic spots. One of the recent addition to our segments is SmartMobility where we deliver full platform to deploy, control and service wide fleets of sharing vehicles and devices.



Doing Business with **Antik Technology**

Let's work together and deliver Hi-Tech globally

Here in Antik we believe only strong cooperation and common understanding together with top-level knowledge can create valuable results for everybody – vendors, distributors, end-customer as well as consumers. Therefore we develop and support partnerships with knowledge based, reputable companies with strong visibility on their target markets, regardless borders or segments. Here you can read how we can help to build and operate sales and support of Antik products.

Getting on board

Get to know each other

We need to hear from you about your current position, your business goals, your target markets and what do you want to achieve using Antik products. We share with you our current operation infos as well as close future plans.

Demokit

Our top-class presentation product will serve you to explore all product features as well as to help your sales people to show what they offer directly on customer sites at later stage. We strongly encourage to use Antik Demokit everywhere you will find interested customer.

Visit Antik HQ

We strongly encourage your business and technical teams to tour our HQ in central Europe to see and better understand how we are different and how to best utilize Antik strengths in your market situation.

Distribution contract and business terms

After your evaluation we will be happy to see your ideas about the size of our future cooperation and we will share with you business conditions which will help you to create extremely competitive offers on your markets.

How we support you to sell Antik products

Marketing

Antik marketing team is ready to help you to organize Antik presence during trade-shows including cost-sharing on major events as well as provide customization of product brochures and catalogues.

Trainings

We regularly organize training for our partners to learn about the features of our products in details (business training) as well as technical training to provide first and second level support of Antik products in your own name. Trainings are provided both in-person in our HQs/branch-office and on-line.

Product Customisation

As we control all product development and manufacturing we can deliver products and software customized to your needs – starting from specific branding up to software change requests to provide features specific to your market needs.

Documentation

With our products you will receive detailed documentation to provide you with extra knowledge needed to achieve top-class presence in front of your customers.

Support

There is dedicated support team available on-line to help you during pre-sales and post-sales process – serving your sales guys during quote preparation as well as to help delivery phase with remote installation and configuration. We can even provide remote assistance in networking specific to multimedia delivery.

To start our cooperation contact us directly under **info@antiktech.com**

About IPTV Management Server **MaxIM**

The power of Antik Technology for Telco, Hospitality and Signage!

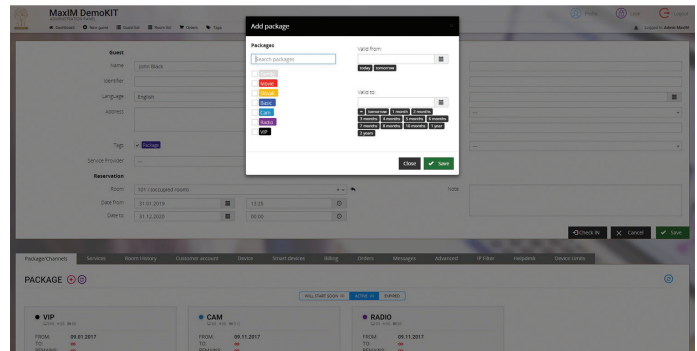
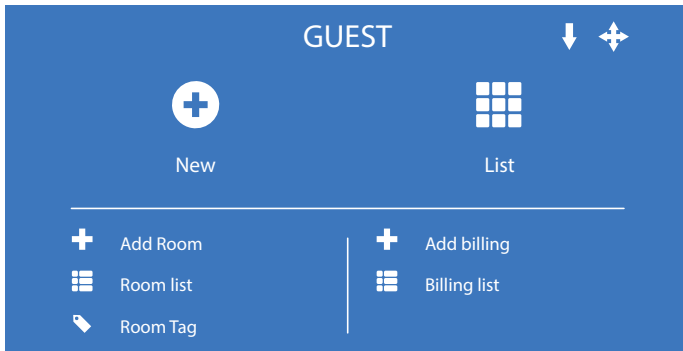


Antik Technology presents a professional cost-effective SW solution for a seamless management of your Antik set-top boxes and Mobile Applications network. MaxIM is the corner stone of Antik Middleware Server Family. You can easily define your channel packages, configure all or only selected customers' STBs, collaborate with other part of the Antik Server Family such as Antik Archive Servers, Antik Mosaic Servers and VoD servers. The MaxIM management server SW can be easily connected to your billing or to the customer care application, so that your users' set-top boxes will be automatically activated and monitored using the same software your employees are familiar with.

Key Features

- Simple channel and channel packages management
- Full remote control of set-top boxes and remote restart features (even in public internet)
- Remote set-top box firmware update
- Electronic Programme Guide database management and seamless EPG content import
- Integrated with other components of Antik Server Family
- STB management and user database
- Viewer statistics (users, channels, time,...)
- SNMP Communication Support
- Instant messaging to STBs
- Digital Signage - Promotions and Event Navigation Solution
- Integration and control of Mobile Applications and SmartTVs
- Hospitality features, welcome message, background image, language options etc. in the same platform
- Mobile Applications and SmartTVs

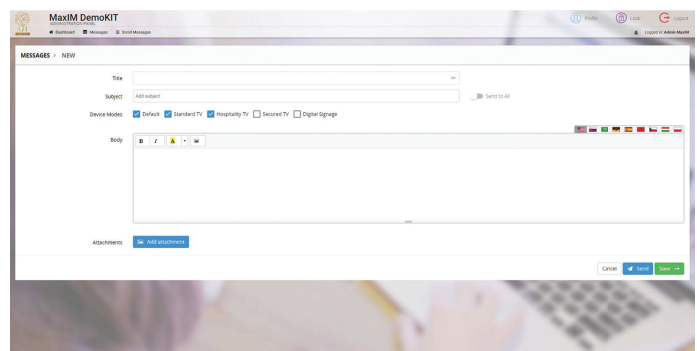
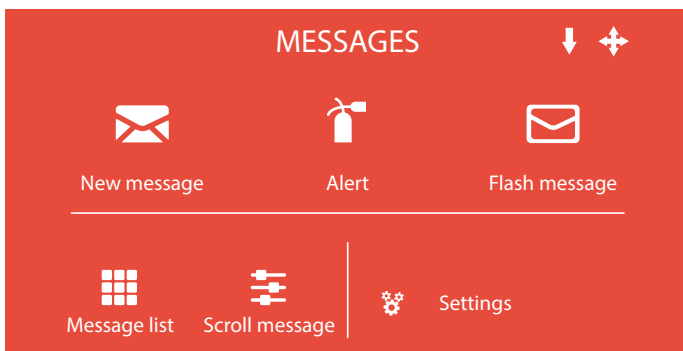
User / Guest module



Assigned packages and channels to guest/users.

USER/GUEST Module brings an opportunity to manage data about guests/users and products, As well as services provided and activated to the guests/users. There is also a possibility to create groups of guests/users according to different constants (e.g. in case of hotel, there can be an apartment, VIP room, non-smoking room, etc.).

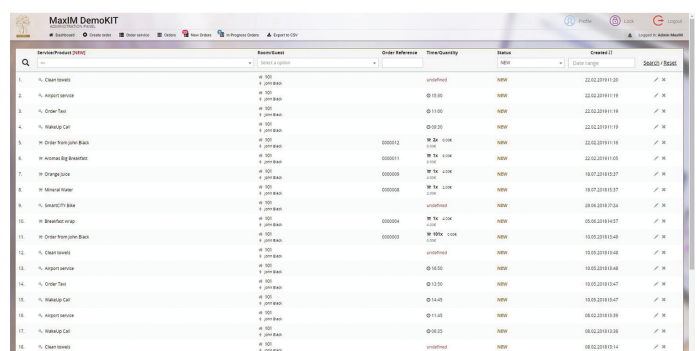
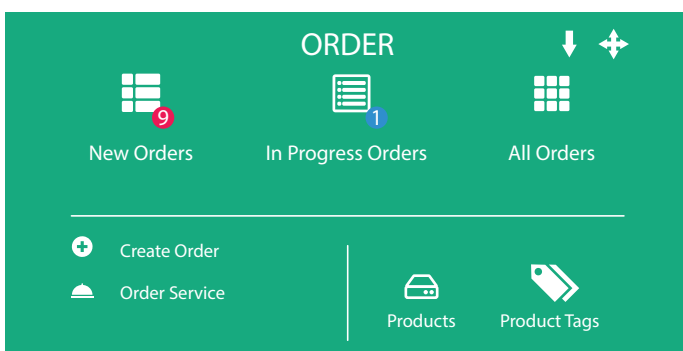
Messages module



New message configuration

The MaxIM allows the user to send a message to a specific STBox, or to a group of STBoxes. You can send three types of messages - normal (send to the message box in the GUI menu), flash (instant messages for a selected group of set-top boxes), scroll messages.

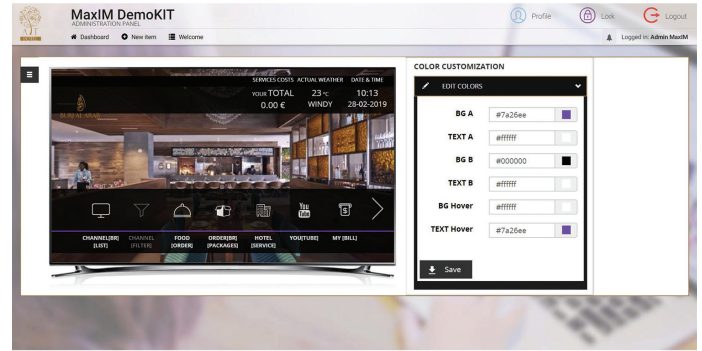
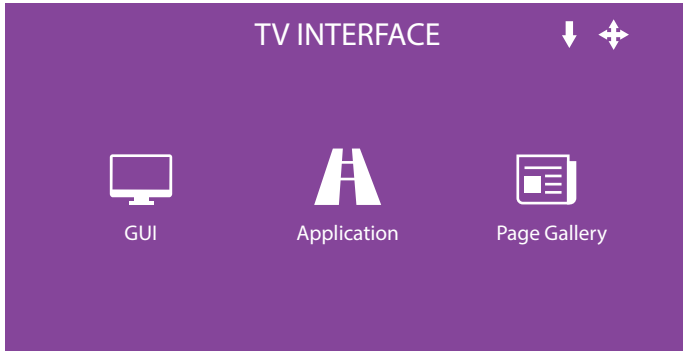
Order module



List of orders

ORDER Module is providing opportunity to guest/users to order products and services and it also includes the tools for managing, creating and adding new products or services. The user of the MaxIM administration panel can add both food menu content and services content to make it available for the guests to order through ORDER module. Doing so, the MaxIM user should edit the GUI menu, i.e. add already created content.

TV interface module



GUI menu item's tools.

TV INTERFACE Module provides full-scale content management system to adapt user interfaces based on your visual identity and insert all necessary TV features and information.

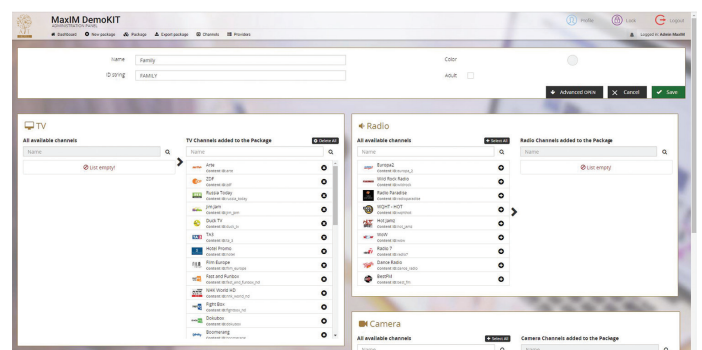
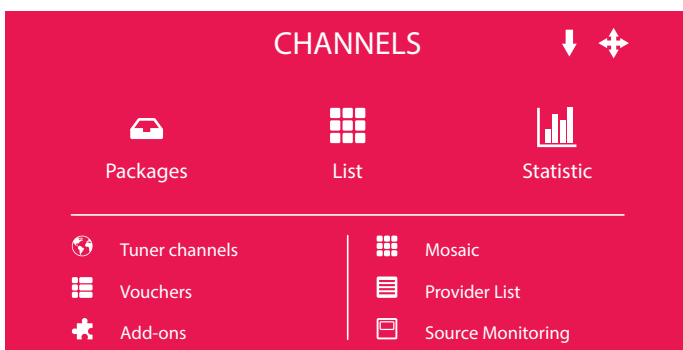
EPG module



Multi EPG preview.

An electronic program guide (EPG) is an application to list current and scheduled programs that are or will be available on each channel and a short summary or commentary for each program. EPG Module of the MaxIM brings single EPG (EPG filtered by a specific channel), Multi EPG and monitoring of EPG.

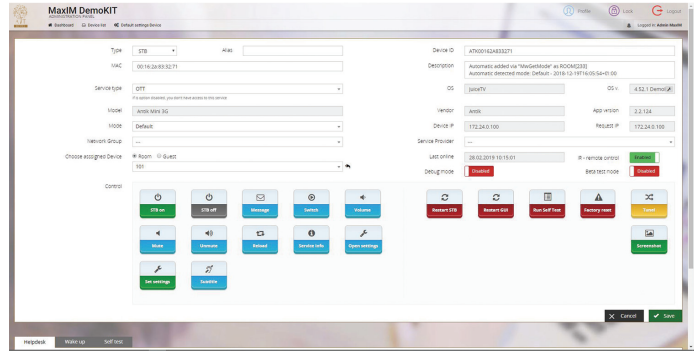
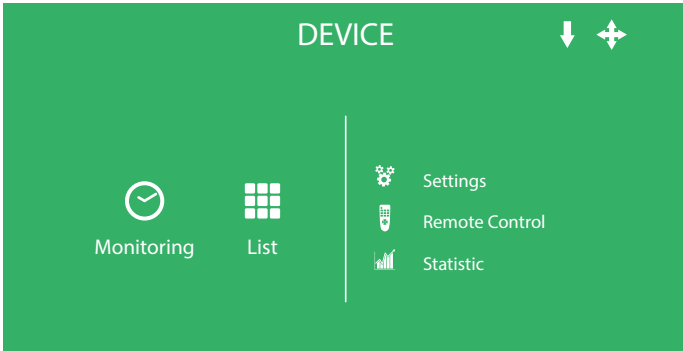
Channels module



Advanced options of channel settings.

CHANNELS Module involves the administration of TV channels, Radio channels, Cameras and TV packages. The user has the opportunity to sort them to the packages and assign specific packages to specific user/guest.

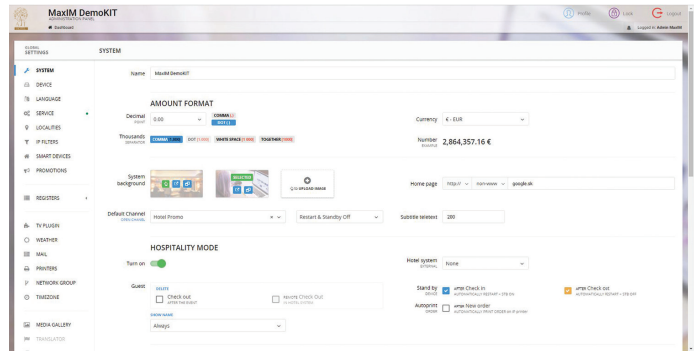
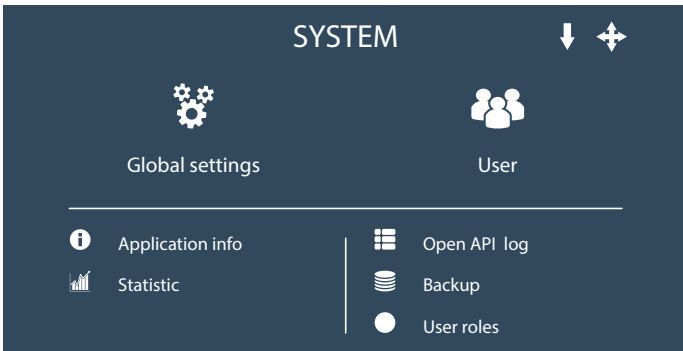
Device module



Device editor screen.

It gives an overview of the registered devices and provides the tools for administration of devices, their monitoring, remote control or the possibility to assign a new device to room or a guest and define a mode, in which a new device should operate.

System module

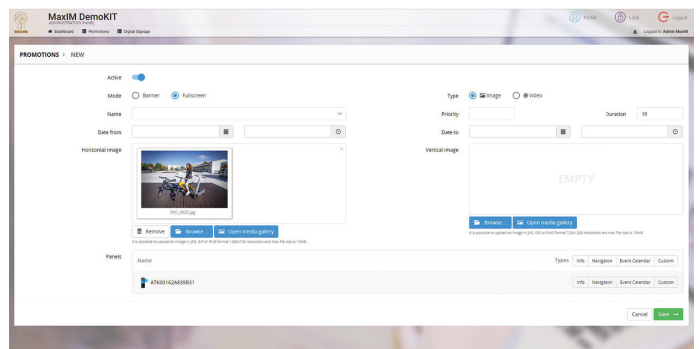
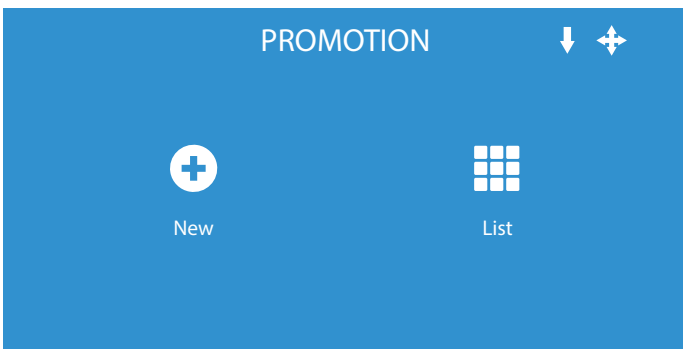


Hospitality mode switch in System Settings.

SYSTEM Module is designed for the management of the system settings within the MaxIM administration panel, including global settings, user, application info, statistic, open API log, backup, and user roles.

Hospitality features

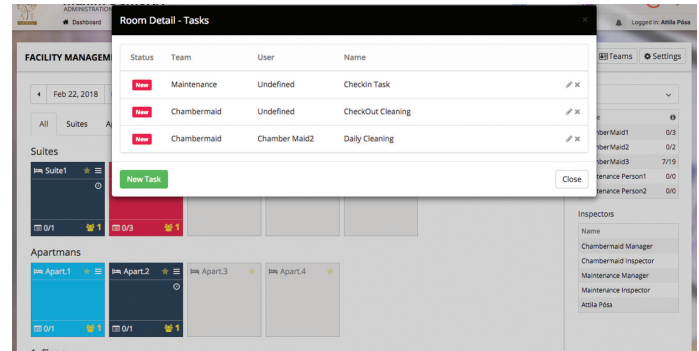
Promotion module



Promotion editor screen.

Promotion Module is designed for creating, editing and managing promotions such as event promotions, advertisements, campaigns, special offers, and others. Once created, promotions are then showcased on the digital signage panels, located in public areas in the hotels, companies, etc. It allows to add pictures and videos in most popular formats.

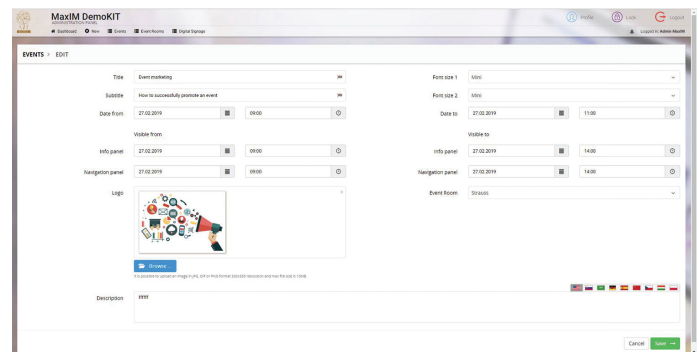
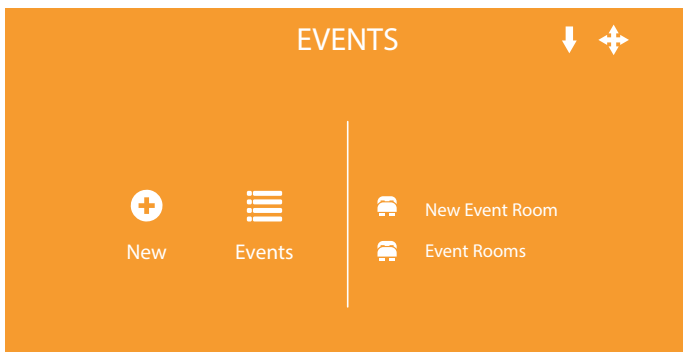
Facility management module



Display of assigned tasks to the room.

It provides with the housekeeping solution and you can manage and track cleaning progress in hotel rooms, assign various tasks and manage teams responsible for cleaning process. There are three main features, namely room plan, tasks, and teams which allow you to control the operation of facility management.

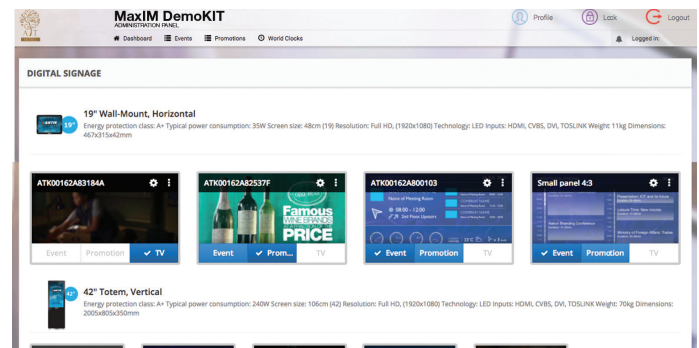
Events module



Event editor screen.

It offers event management solution that helps you to streamline event planning and with this module, you can keep your event management up-to-date, create new events and event rooms, as well as access and edit planned events and event rooms.

Digital signage module



One click change of screen

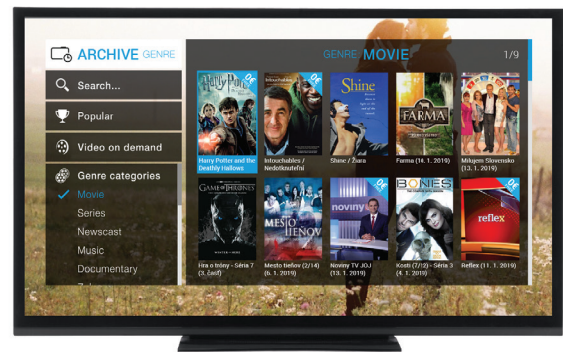
DIGITAL SIGNAGE Module is where you find the tools to manage digital signage devices and its metadata. Built-in tools provide an opportunity to set up mode, screen, screen rotation, background, event calendar, navigation to the event rooms, assign promotions, and view or edit the default world clocks.

Antik Middleware 2.0 GUI



Basic menu

Very fast, clear and easy to navigate.



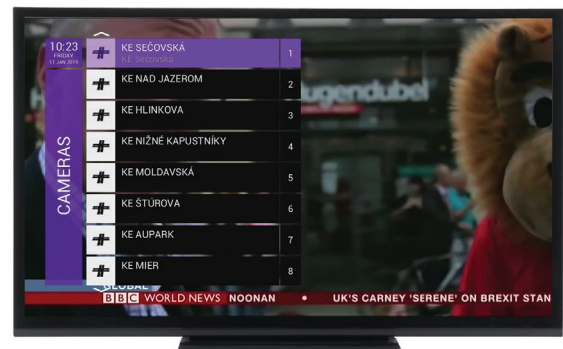
Archive by genres (Catch-Up TV)

World unique way to access catch-up TV content. All programs are automatically sorted in „VOD style“ UI for easy access.



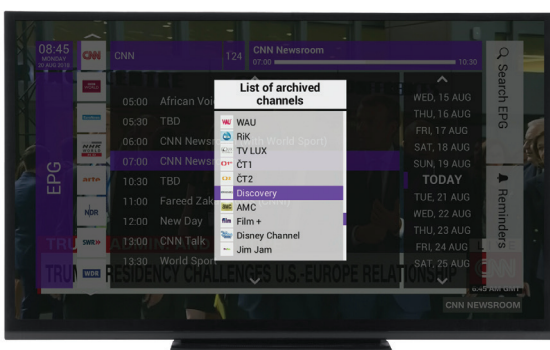
Channel Filtering

Find the channel of your requirement easier. Now you can filter the channel according to the language, genres, favourites or you can search by a keyword.



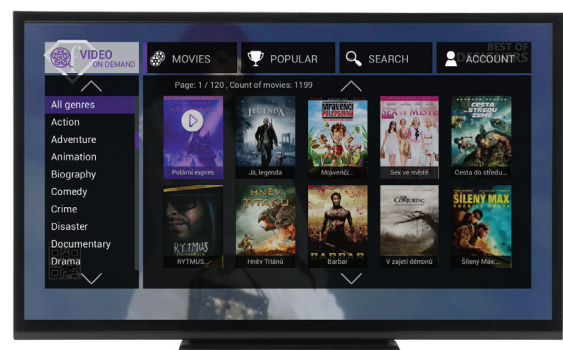
Cameras

Linear streams from camera sources can be placed in separate category. Support of ONVIF Camera Control Protocol inside GUI.



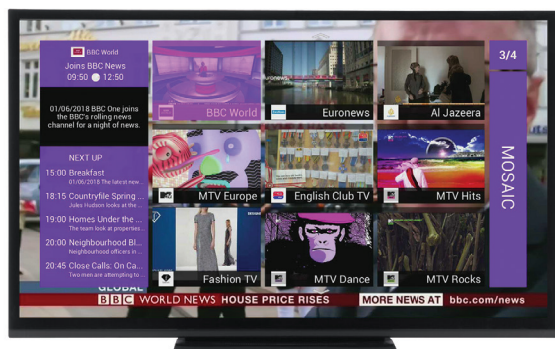
Archive by channels

Archive is sorted by channels according to the time it was broadcasting.



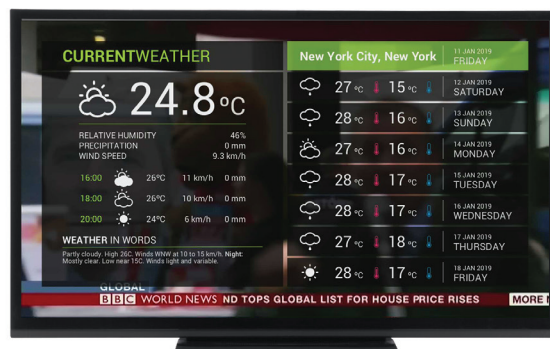
VoD

Complete VOD GUI supported by Antik VOD Server Solution. Choose a movie from the database or search some new in your favorite category. Watch trailers, movie description or rank the movie.



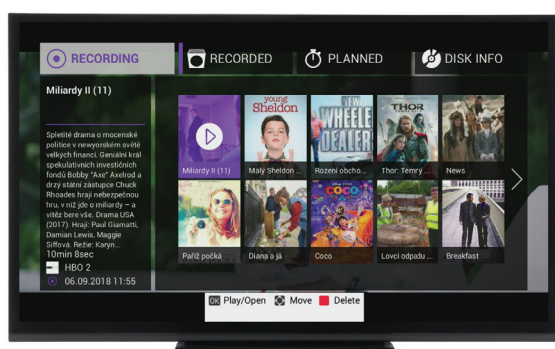
Mosaic

Mosaic UI gives end-user chance to watch dozens of channels at once and decide for the favorite one. Delivered by Antik Mosaic generator - low-cost mosaic encoder engine.



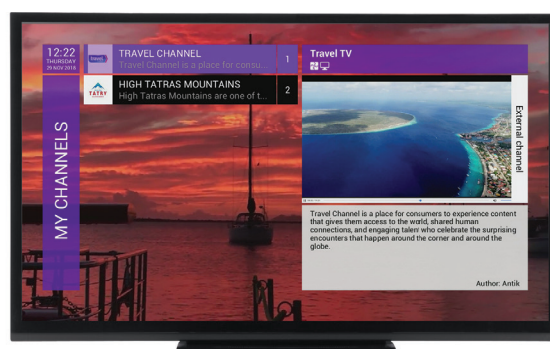
Weather

Access to predefined cities weather forecast up to 7 days.



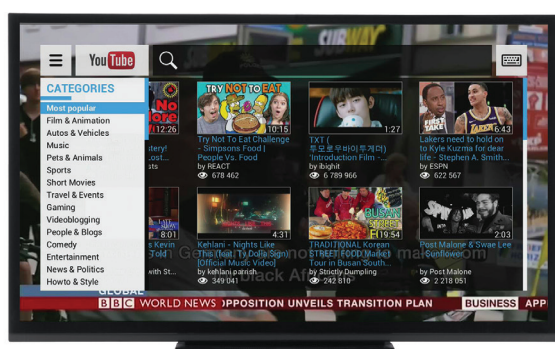
PVR

Choose program from EPG and record it on HDD or USB in set-top box. Make your own video library and watch your favourite movie whenever you want.



My channels

As soon as you will install chosen plugin, it is automatically added to the list of your own channels. You can find them in the main menu, Channels-My channels.



YouTube

Easy to navigate, adapted to Tv screen. Full access to YouTube movie content.



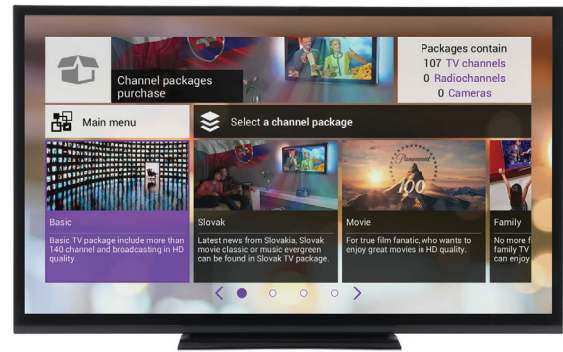
Media Player

Connect STB with PC or USB key and create multimedia center based on DLNA technology. Watch photos, listen to music and watch videos.



SmartHome

Managing your household has never been easier. SmartHome menu offers you to change the temperature in the room, turn on the light, or let you know in case of unwanted visit.



Package order

Now you don't have to go to branch or to call centre if you decide to add a new channel package, you can do it easily from your set-top box.



In-menu promotion

Learn about the news we offer by going through menu. If something interests you, order it by one click.

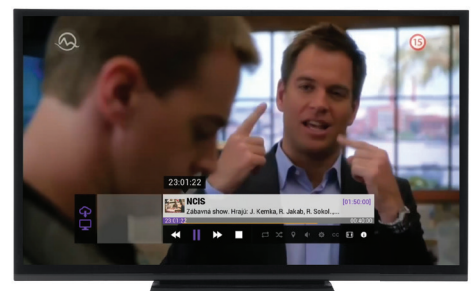
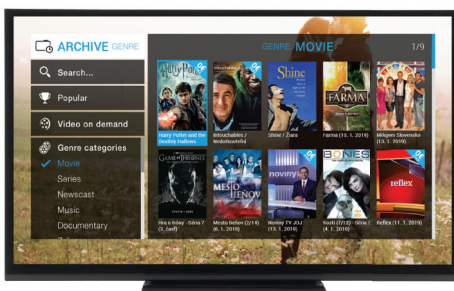


Product Shop

With the menu in set-top box you can comfortably get information, review or buy anything you need, e. g. Smart Home, IT devices, accessories or vouchers etc.

Pre-roll advertising

With Antik ads you can reach potential customers and have them take action before they watch or search for archived channel. It is managed with Digital Video Ad Serving Template (VAST), that is script that gives video players information about which ad to play, how the ad should show up, how long it should last and whether users are able to skip it.

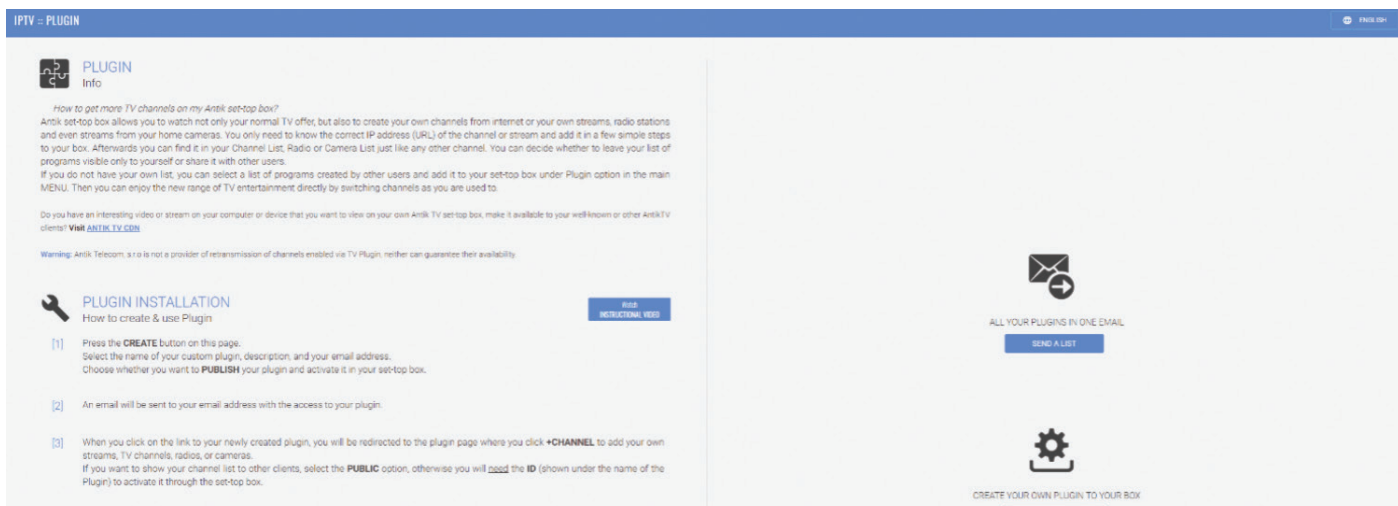
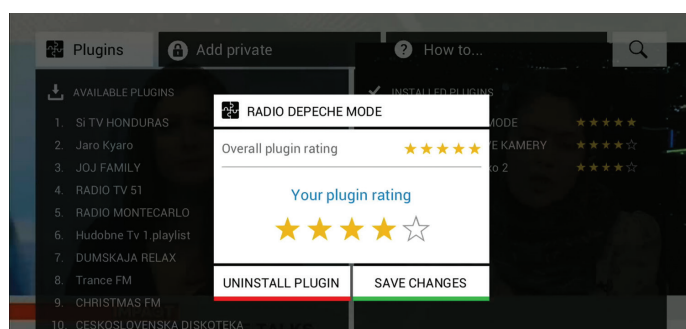
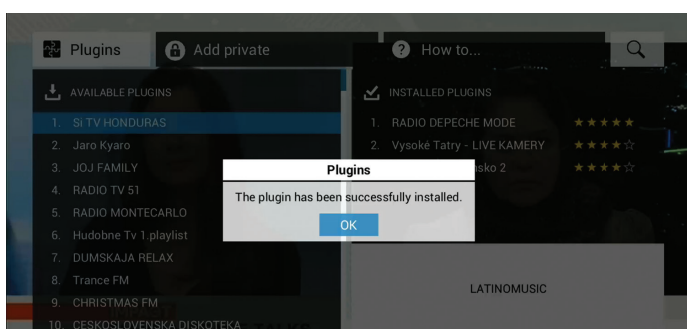
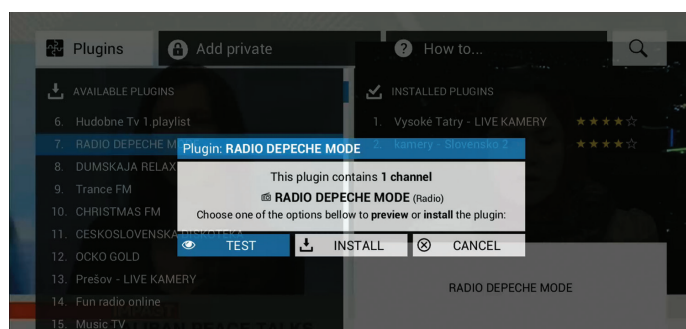
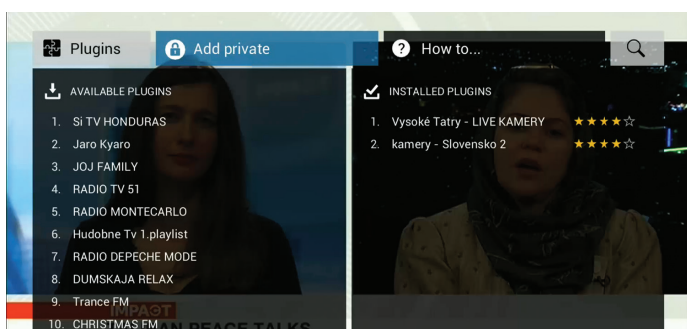
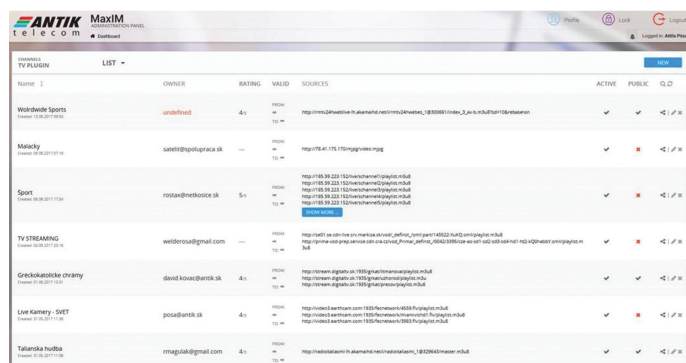
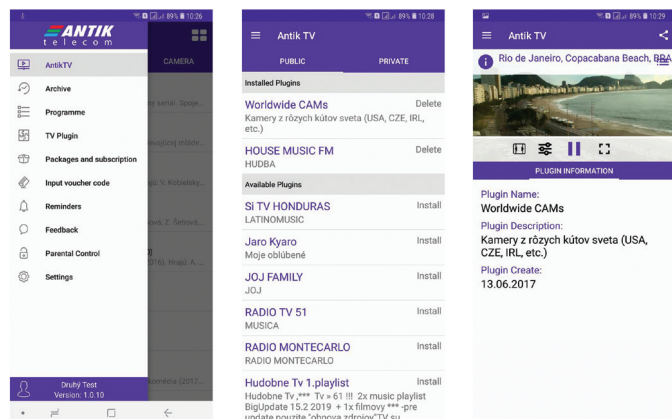


TV Plugin

BYOC CONCEPT INSIDE STB

Antik set-top box allows you to watch not only your normal TV offer, but also to create your own channels from internet or your own streams, radio stations and even streams from your home cameras. You only need to know the correct IP address (URL) of the channel or stream and add it in a few simple steps to your box. Afterwards you can find it in your Channel List, Radio or Camera List just like any other channel. You can decide whether to leave your list of programs visible only to yourself or share it with other users.

If you do not have your own list, you can select a list of programs created by other users and add it to your set-top box under Plugin option in the main MENU. Then you can enjoy the new range of TV entertainment directly by switching channels as you are used to.

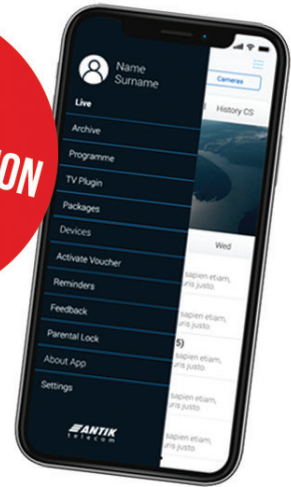


End-2-End OTT TV Delivery platform

OTT Streaming - Management - Encryption - VOD - Archive and more!



**NEW
APP GENERATION
UPDATED UI**



Antik brings to your TV operations full mobile Tv solution for your clients smart phones, tablets, TVs and more. Fully integrated to MaxIM Management system it enables unlimited entertainment including linear TV with EPG, catch-up TV, VOD, all secured with 128 bit encryption. Unique Antik TV Plugins add-on gives end-users chance to enhance its channel line-up with its own or internet located linear content. State-of-art live snapshots apps design in channel list is available for iOS phones and tablets, Android phones, tablets, boxes and TVs as well as Windows C, tablets and Apple TV boxes, not to forget Antik Linux set-tops. We provide full service with registration and updates to major application stores. Typical setup includes MaxIM Management System, Antik HEVC transcoders, Antik Live Streamers, Antik Archive and VOD systems.

Antik TV app

- Antik linear TV
- Catch-up TV
- VOD
- Electronic Programme Guide
- In-app purchase
- TV Plugin: Self-Service end-user channels add-on



Requirements:

Antik TV for smartphones

Android 5 or iOS 9
(smartphone or tablet)

Antik TV for set-top boxes and TV

Android Box:

Android 5 and higher
2GB RAM
H.264 ++AAC support
LAN, WLAN

Android TV:

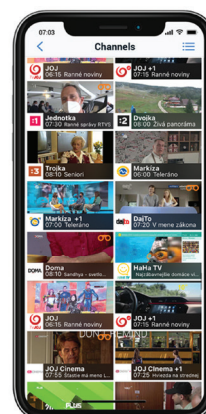
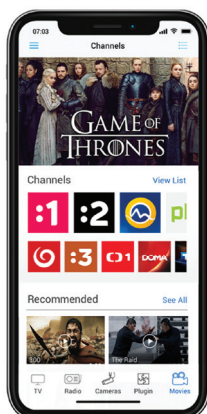
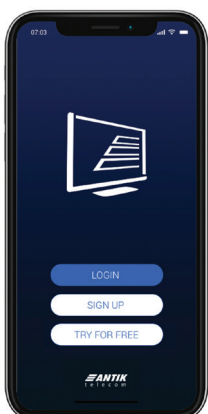
Android 5 and higher

Apple TV Box:

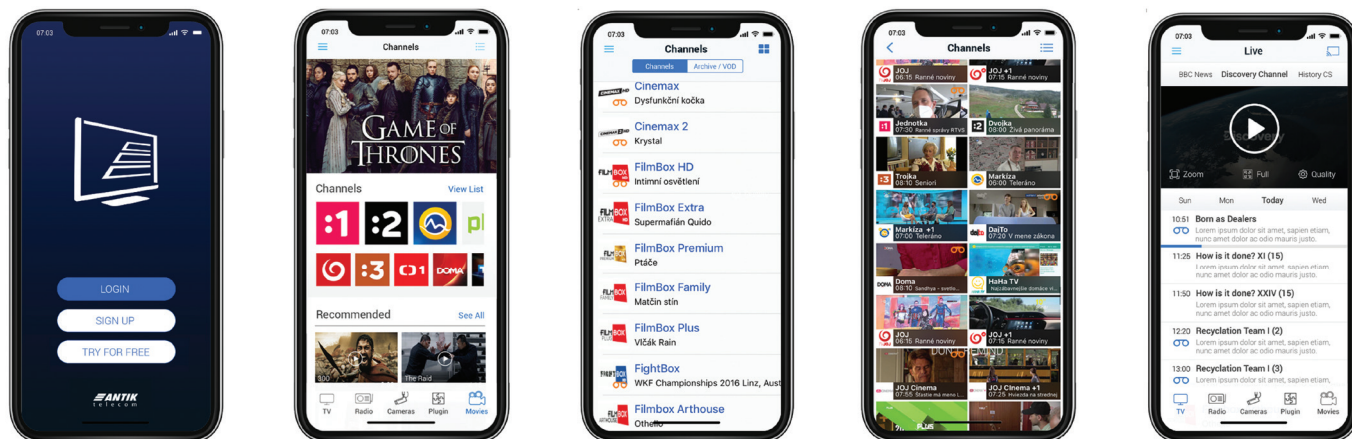
iOS 10 and higher
ATV4

App Store

Android



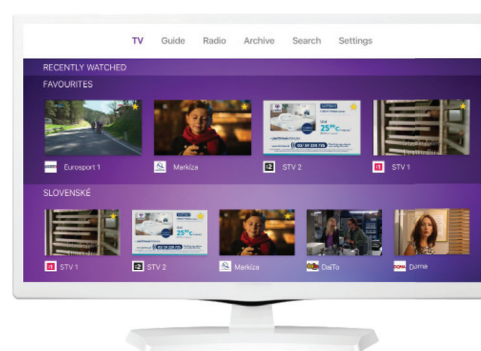
End-2-End OTT TV Delivery platform



Android TV:



Apple TV:



Antik Media Streamer

End-to-End TV Everywhere delivery system.

Antik Media Streamer provides you with end-to-end way to create, deliver secure and manage your local or global content delivery network. It uses robust HTTP Live Streaming (HLS) protocol to reach your customers even in areas with limited quality of public internet.

Thanks to the years of Antik Media Streamer development you can benefit from modules covering all the areas of live streaming, VOD, state-of-art catch-up TV (archive of linear TV) over public internet as well as timezone shifting together with durable fully adjustable replication and mirroring modules combined with stream protection.

Antik Media streamer can be successfully used inside of managed networks of telco operators to provide their customers with interactive OTT content (VOD, catchup TV) as well as for global OTT content providers who can benefit from the robustness of Antik live streaming with mirroring and replication technology to achieve 24/7 access of huge number of users distributed around the world.



Free trial
on www.antiktech.com

- Antik linear TV
- Catch-up TV
- VOD
- Electronic Programme Guide
- Customer Zone
- In-app purchase
- TV Plugin: Self-Service end-user channels add-on

Antik Streamer
technology

ID: 1 NAME: ANTIK CDN 1
VERSION: v1.0.0-87-g3e6717, BRANCH: testing, BUILD: 2012-10-09 09:12:59

REFRESH IN: 2, CONNECTION OK

Logout

- Primary stream for channel 1 Planko is OFFLINE (Module: Ingest)
- Primary stream for channel 2 Cacao TV is OFFLINE (Module: Ingest)
- Unauthorized stream from "88.212.8.3" is blocked for primary ingest of channel 2 "National Geographic" (Module: Ingest)

Management & System monitoring

MGMT PROCESS UP: 4d 21h		HTTP SERVER RUNNING		PHP FAST-CGI RUNNING		CLIENT AUTH ENABLED		SYSTEM MONITOR RUNNING		CONFIGURATION VER: 2012-10-18 21:06:45		LICENSE OK, DETAILS	
CPU	LOAD	IOWAIT	STORAGE	RX	TX	AUTHORIZED	SESSIONS	RAID	INTERFACES	DATETIME	UPTIME		
2%	0.75 / 8	0%	660.97 GB / 1.78 TB	20Mbit/s	0Mbit/s	0		OK	bond0	Wed Oct 24 13:58:54 CEST 2012	26d 23h		

Ingest RX Total: 14.56 Mbit/s

Global UDP/RTP IP authorization ENABLED
[Show settings](#)

RUNNING 1 Planko
0.00 Mbit/s [rtp://@232.232.54.2:5004](#)
1.88 Mbit/s [http://aaa:bbb@10.254.9.201:2002](#)
UDP/RTP IP authorization enabled. [Show settings](#)

RUNNING 2 Cacao TV
0.00 Mbit/s [rtp://@232.232.54.2:5004](#)
1.74 Mbit/s [http://aaa:bbb@10.254.9.202:2001](#)

RUNNING 3 Feature TV
1.76 Mbit/s [http://aaa:bbb@10.254.9.202:2001](#)
2.12 Mbit/s [http://aaa:bbb@10.254.9.202:2002](#)

RUNNING 8 Sciology
1.77 Mbit/s [http://aaa:bbb@10.254.9.202:2001](#)

RUNNING 5 Karaoke
1.77 Mbit/s [http://aaa:bbb@10.254.9.202:2001](#)

RUNNING 6 TV Mickey
1.77 Mbit/s [http://aaa:bbb@10.254.9.202:2001](#)

RUNNING 7 Film+
1.77 Mbit/s [http://aaa:bbb@10.254.9.202:2001](#)

Stream replication RX Total: 2.03 Mbit/s

ID	STATUS	RX	NAME	DESTINATIONS	LAST START, UPTIME
1	RUNNING	2.03 Mbit/s	Planko	10.254.9.10:9191	2012-10-19 16:06:45 (4d 21h)

Live streaming RX Total: 12.09 Mbit/s

ID	STATUS	RX	NAME	PLAYLIST	SEGMENT DUR/CNT	LAST START, UPTIME
1	RUNNING	2.01 Mbit/s	Planko	OK	10 / 5	2012-10-19 16:06:45 (4d 21h)
2	RUNNING	1.67 Mbit/s	Cacao TV	OK	10 / 5	2012-10-19 16:06:45 (4d 21h)
3	RUNNING	1.61 Mbit/s	Feature TV	OK	10 / 5	2012-10-19 16:06:46 (4d 21h)
8	RUNNING	1.77 Mbit/s	Sciology	OK	10 / 5	2012-10-19 16:06:46 (4d 21h)
5	RUNNING	1.53 Mbit/s	Karaoke	OK	10 / 5	2012-10-19 16:06:46 (4d 21h)
6	RUNNING	1.81 Mbit/s	TV Mickey	OK	10 / 5	2012-10-19 16:06:48 (4d 21h)
7	RUNNING	1.81 Mbit/s	Film+	OK	10 / 5	2012-10-19 16:06:48 (4d 21h)

Timezone shifting Storage used: 175.88 MB RX Total: 2.05 Mbit/s

ID	STATUS	RX	NAME	PLAYLISTS	STORAGE USED	SEGMENT DUR/CNT	LAST START, UPTIME
1	RUNNING	2.05 Mbit/s	Planko	00:10 OK	175.88 MB	10 / 5	2012-10-19 16:06:48 (4d 21h)

Archive recording Storage used: 178.69 GB Total recording time: 2m 24d Remaining time: 1m 24d RX Total: 2.01 Mbit/s

ID	STATUS	RX	NAME	PAUSES	STORAGE USED	DAYS ARCHIVED	TODAY INTEGRITY	INTEGRITY	LAST START, UPTIME
1	RUNNING	2.01 Mbit/s	Planko		178.69 GB	10 / 20	GAPS: 0 (0sec)	Integrity	2012-10-19 16:06:45 (4d 21h)

Archive mirroring Storage used: 479.22 GB

ID	STATUS	NAME	SOURCE SERVER	LAST SUCCESSFUL SYNC	STORAGE USED	LAST START, UPTIME
4	RUNNING	Eurosport	10.254.9.150	OK (-59sec)	479.22 GB	2012-10-19 16:06:44 (4d 21h)

Live Streaming

- Powerful scalable HTTP Live Streaming Solution for global live content delivery. Ideal for low-speed and unstable access network conditions and OTT distribution thanks to state-of-art segment streaming feature.
- Allows unicast streaming using HLS protocol.
- Allows to stream up to 2Gbps of traffic per individual server (based on your server hw e.g. when using 1mbps stream system can serve up to 1000 users simultaneously, increase of streaming capacity is possible).
- Allows to pre-buffer the content into client device memory.
- Fast-zapping support- using burst data transfer which can pre-fill buffer rapidly to decrease zapping time.
- Full recovery of the stream in case of network drop-out (up to 30s) – non-visible for the viewer.
- Includes segmenter which push segments into RAM to increase system performance.
- Allows to setup length and number of segments stored in playlist of the server.

3	RUNNING	1.65 Mbit/s	TV MUSIC	OK	10 / 5	2012-10-18 12:46:01 (43min)
8	RUNNING	1.65 Mbit/s	Cacao	OK	10 / 5	2012-10-18 12:46:01 (43min)
5	RUNNING	1.65 Mbit/s	Children TV	OK	10 / 5	2012-10-18 12:46:01 (43min)

Catch-Up TV Modul (TV Archive)


Archive recording									
					Storage used: 18.90 GB	Total recording time: 2m 28d	Remaining time: 2m 2d	RX Total: 1.87 Mbit/s	
ID	STATUS	RX	NAME	PAUSES	STORAGE USED	DAYS ARCHIVED	TODAY INTEGRITY	INTEGRITY	LAST START/UP/TIME
1	RUNNING	1.87 Mbit/s	Planko		18.90 GB	2 / 20	GAPS: 20 (36min 13sec)	Integrity	2012-10-16 12:48:55 (43min)

- Records all content of the specific stream and allows access to it using EPG information
- Includes segmenter which creates 10s files- directly enables to use HLS protocol for content delivery
- High availability – even currently played program can be accessed (less than 2 minutes from original playback time)
- Uses HLS protocol for streaming, so all the features described in Live Streaming can be utilized
- Allows to define time breaks in broadcasting to save space during black screen period
- Large scale archiving (depends on storage capacity)
- Intelligent erasing mode – identify oldest records and deletes them to free-up disk space for new recordings
- Integrity analyser detects content drop-outs and enables them to other CDN components

Archive integrity: ID 1 NAME XPLOSION TV															Data refresh interval: 1 min, Page refresh interval: 30 seconds.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
#	DATE	TIMELINE																						STORAGE USED	GAPS	GENERATED AT																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
1	2012-10-16 Tuesday																							11.39 GB	1: 00:00:27-00:00:50: 23sec	2012-10-16 13:30:26																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
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Archive Snapshots Module

- Creates snapshots for each video segment which was recorded by Catch-up TV module
- Allows comfortable end-user seeking in archived TV content
- Recorded pictures can be easily used for other Streamer modules
- Different snapshots profiles- profile name, picture size, resize method (LetterBox, Pan&Scan, Fill-in), background color (for LetterBox resize method), picture format
- (gif, bmp, jpeg), picture quality, jpeg compression quality, brighten effect

Snapshots: ID 1 NAME MUSIC TV			
PROFILE	DATE	HOUR	SNAPSHOTS
slb (177x133 panscan)	2012-10-16 28.99 MB	0	Total storage used per channel: 46.48 MB 13:00 
slbhd (221x166 panscan)	2012-10-15 17.49 MB	1	
slbfullhd (333x250 panscan)		2	
		3	
		4	
		5	
		6	
		7	
		8	
		9	
		10	
		11	
		12	
		13	
		14	
		15	
		16	
		17	
		18	
		19	

Archive Mirroring Module

- Archive mirroring from other CDN server – to overcome content distribution problems on large distances or variable quality networks when continuous live stream is unavailable
- It can be effectively used to achieve high scalability using mirroring together with Load Balancer Module

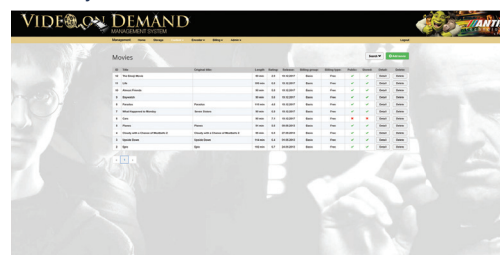
Streamer and Storage

It is a module of the Antik Media Streamer which secures placement of the video content and provides it to the client's devices. The content must be prepared in form of a media package, which is an output of the VOD Encoder product. The VOD streamer provides the content through the HLS protocol, which enables a fluent and stable streaming also in slower networks. Thanks to the buffering it is capable of overcoming a short network downtimes without having the client side noticing it. Thanks to a real time streaming, it's not necessary to wait for the download of the whole movie to the client's device. The storage cooperates with the Load Balancer, and thus allows a scaling of the content into multiple servers while increasing the capacity and the load balancing. At the same time, the Load balancer is authenticating client and allowing an access to a secured content. As this module is an application of the Antik Media Streamer, there are all the monitoring functions and tools of this application available.

Video-On-Demand

This is an End-2-End system for a movie content preparation (encoding), storage, balancing the load, streaming and protection. Our robust segment streaming and buffering SW enables you to deliver content even in a lower quality Internet networks. The replication SW enables you to hold the VOD data load under control around-the-clock and ensure a non-stop operation even in the unlucky situation of partial server hosting drop-out. The VOD is the easiest way of watching movies online. The user is able to watch a movie just by a few clicks on his/her remote control. This video content will start immediately, the user doesn't need to wait on the full movie download as it is instantly streamed to the end-devices.

- Searching by the title, year, actor, genre, news and others
- Rate the movies or choose the movie with the highest rating amongst your network
- Filter by date, name, rating
- Virtual keyboard controlled by remote control or IPTV Multimedia keyboard
- Read movie description and watch movie trailer
- In more detailed view of movie description are also displaying similar movies
- Billing system connector



GUI and Management

It is a web based Middleware, which secures the management of the VOD content and presents the user interface for an access to the VOD from the client's device (set-top box). It's able to scale the application on a large numbers of devices. It contains the billing connector module, which enables a secure invoicing for the seen content. It also cooperates with the Load Balancer to enable an immediate playing of a video content straight after a movie has been purchased meanwhile, it reserves the VoD storage capacity.

VOD Encoder

This device encodes the VoD content into the HLS format, so that it can be stored on the CDN servers. It also supports an automated transcoding thanks to a transcoding queue. It offers many supported video formats like .avi, .mp4, .mpg, .and, DVD ISO images and lots of others. The VoD Encoder is easily controlled through the web interface which allows upload of big files into the queue. The Multi user support allows the sharing of the transcoding service. Multiple audio tracks are also supported as well as the DVB subtitles used in the DVD discs.

Time-Zone Shifting Modul

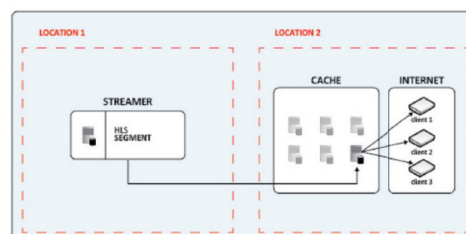
Timezone shifting							Storage used: 174.10 MB	RX Total: 2.05 Mbit/s
ID	STATUS	RX	NAME	PLAYLISTS	STORAGE USED	SEGMENT DUR/CNT	LAST START, UPTIME	
1	RUNNING	2.05 Mbit/s	Planko	00:10 OK	174.10 MB	10 / 5	2012-10-16 12:46:02 (43min)	

- Shifts the playback time of live stream
- Modul is targeted to be used in case of streaming to global time zone different than the timezone of content origin
- More shifted streams from one source - Allows multiple time off-sets of the same content (TV channel) using the same data to save storage
- Support long playback time off-sets (storage size is the only limit)
- Uses HLS protocol for streaming, so all the features described in Live Streaming can be utilized

Antik TV Stream Cache

The global TV streams delivery is now even more stable and reliable with the Antik StreamCache System. It secures a good quality linear, timeshifted or archive TV distribution around the world at reasonable costs even to areas with expensive backbone connections.

- Automatically routes stream request to the appropriate cache server based on:
 - Servers utilisation
 - Rules
 - Routing tables
- Cache servers ingests only streams which are used by at least one end-user device which leads to significant bandwidth savings on channels entered into streamer nearest cache server selection based on IP address group rules (e.g. geography, provider IP block)
- Alternative cache server prioritization based on routing tables enables to create robust redundant content delivery networks
- Multiplatform – STBs, mobiles, tablets, PCs as end devices



Load Balancer

The managing CDN server cluster, checking in periodical intervals and their status, and forwarding clients to each server depending on required service. In case of a failure of a CDN server, the Load Balancer will redirect end customers to a working CDN server. It allows an authentication of the end customer devices and manages the access to the content and services. It contains statistical functions for the analysis utilization rate and the recording data about the watched content for the billing purposes and for the audience measurement. It also contains the monitoring interface for the CDN server cluster surveillance.

Antik DVB / IP CAS / Scrambling

Multicast and Cable TV (DVB-C/T/T2) Scrambling System

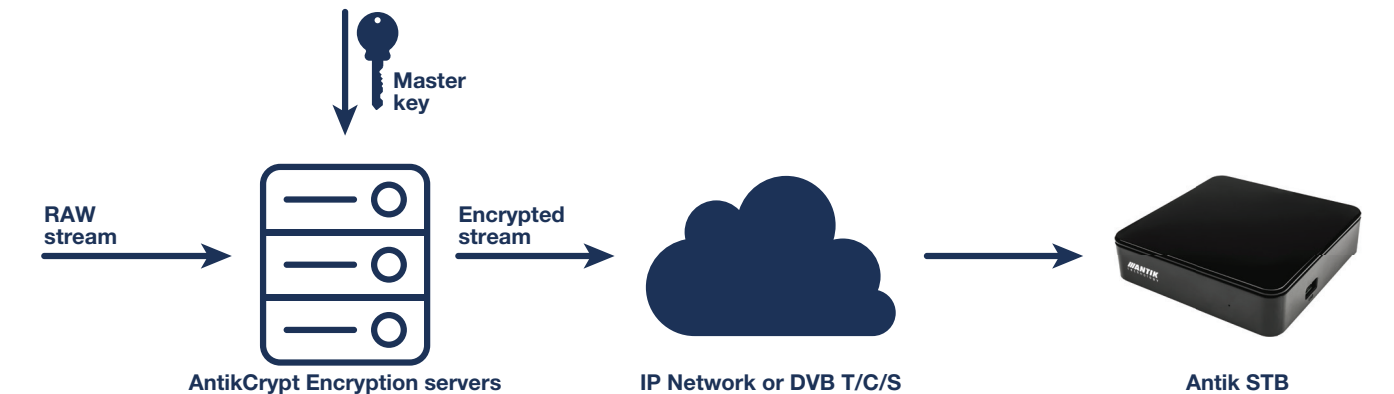
ANTIKCrypt stream encryption system provides an efficient and secure way of protecting streams, including IP, DVBT/C/S. It can be quickly and easily deployed in existing headend infrastructure. Single Encryption can be utilised in both coax and IP networks.

Encryption engine is based on robust Antik Media Streamer platform as its module and it can be easily installed on any virtual or bare metal server, lowering the initial cost.

Encryption is based on a 2-level model, with combination of CAS encryption with fast key rotation, which is further secured with AES256 encrypted master key. ANTIKCrypt player is already embedded ANTIK set-top box FW which provides fast and easy deployment, with minimal configuration.

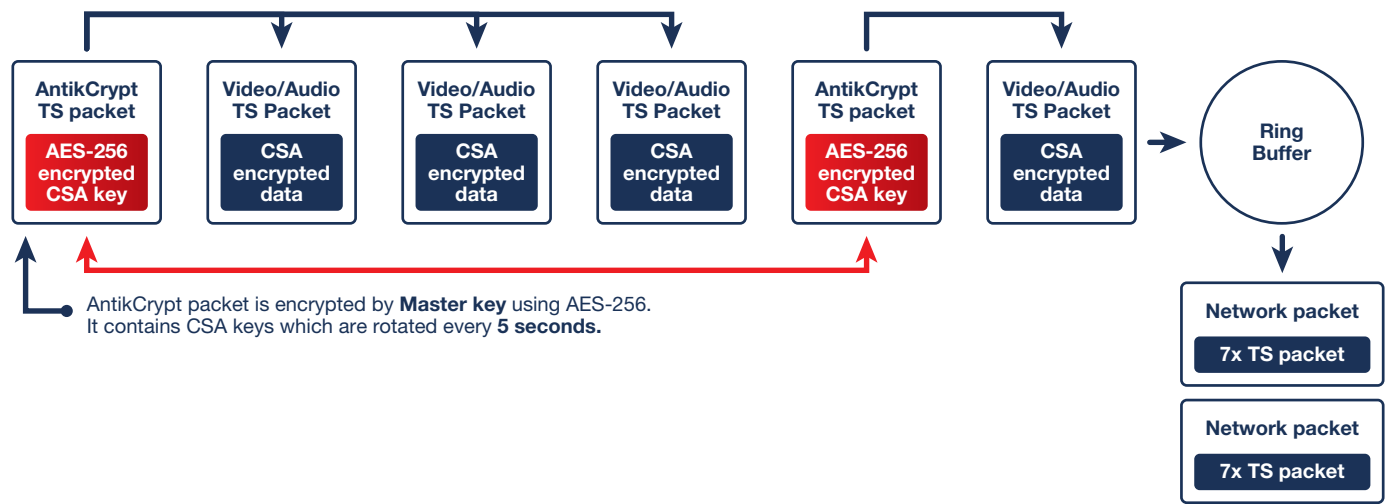
Key Features

- Advanced 2-level encryption based on CSA + AES256 with fast key rotation
- Fast and easy deployment using commodity virtual or bare metal servers
- Suitable for IP, DVB T/C/S
- Player already included in standard ANTIK set-top box firmware



Encryption scheme

Scheme shows 2-level encryption. CSA keys are rotated and transmitted in special TS packets encrypted with AES256 master key.



Antik KeyRider Scrambling for Unicast/OTT

Protection management for your content monetization

Protect your system against unauthorised viewing and dangerous server overflow. Uses strong AES 128 encryption required by content owners.

The Key Server defines keys and assigns them to specific channels. The Key server continuously generates a new version of keys in defined intervals (for each key the interval can be defined independently) - the key rotation. The Media Streamer periodically downloads new versions of keys and enciphers the channels which it finds in the keyserver definitions using a strong AES-128 algorithm. There is a mediaplayer decypher in playlist KeyID for each video segment included. The player asks the KeyServer for the exact key using the http XML request which is protected by an even stronger AES-256 algorithm. The KeyServer either does or does not answer with a key based on the client database. To communicate with the KeyServer each client has been assigned a unique cypher key. In case of compromising the unique end-user device, it is possible to block this device separately, without endangering the whole system. To allow operating with the archive (catch-up TV) the keys are stored on the KeyServer up to one year.

System components

- Antik Media Streamer
- Key Server
- CPE devices:
 - STBs
 - Smartphones (iOS, Android, Win8)
 - Tablets
 - PC
- Customer database



Key Features

- Multiplatform solution - STB, Android, Win8 and iOS
- Designed for TV Everywhere (OTT) environment
- Using above industry standard AES-128 algorithm - 128bit long key!
- Protects live streaming, catchup (archive), VOD and PVR
- Easy to install and operate on standard HW equipment
- AES 256 used for data exchange between servers and devices

ANTIK KeyServer
technology VERSION: , BRANCH: , BUILD:

Logout

Monitoring
 ETH: primary (eth0)
 TX 0Mb / 500Mb
 RX 0Mb / 500Mb
 RAM 193.97 MB / 3.87 GB
 CPU 0%
 LOAD 0.00 / 4 cores
 REDIS RAM USAGE 35.99MB
 FIREWALL **ENABLED** [Show rules](#)
 DATETIME, UPTIME Sun Mar 17 08:42:10 CET 2013 16d 6h

Encryption keys
 Accounts
 Channels
 Client requests
 All requests
 Error requests
 Known clients
 CDN requests
 Known CDN servers
 All requests
 Logs
 Main process
 Client import
 Channel import
 Errors
 Test utils

Refresh

Search by Key ID [Submit](#)

Active keys

ID	RENEW	ACTIVE VERSION	LATEST VERSION	OLDEST VERSION	VERSIONS
Detail STV1	1min	Version 1363506100 Generated 2013-03-17 08:41:40 (-34sec) Value 366363a8f0d5f06d4f572599e3363ee	Version 1363506100 Generated 2013-03-17 08:41:40 (-34sec) Value 366363a8f0d5f06d4f572599e3363ee	Version 1361444344 Generated 2013-02-21 11:59:04 (-23d 20h) Value 85d5e87996142c83c0b9bee4a4e9f140	30866
Detail MARKIZA	1min	Version 1363506100 Generated 2013-03-17 08:41:40 (-34sec) Value 4d6503b31877862fd6431e40b4b41908	Version 1363506100 Generated 2013-03-17 08:41:40 (-34sec) Value 4d6503b31877862fd6431e40b4b41908	Version 1361444344 Generated 2013-02-21 11:59:04 (-23d 20h) Value 98a87c756607b8e6f18dbbc8dab05a89	30864
Detail STV2	1min	Version 1363506100 Generated 2013-03-17 08:41:40 (-34sec) Value 1ce82e4c904aab9754be9f05b7c841ff	Version 1363506100 Generated 2013-03-17 08:41:40 (-34sec) Value 1ce82e4c904aab9754be9f05b7c841ff	Version 1361444344 Generated 2013-02-21 11:59:04 (-23d 20h) Value 169278c5b8ec0dc64b6dbdb7e1a66bf	30861
Detail DOMA	1min	Version 1363506100 Generated 2013-03-17 08:41:40 (-34sec) Value 5b25e6e2b79d12c5b0d7ee8f77f57591	Version 1363506100 Generated 2013-03-17 08:41:40 (-34sec) Value 5b25e6e2b79d12c5b0d7ee8f77f57591	Version 1361444344 Generated 2013-02-21 11:59:04 (-23d 20h) Value fc390413c57fe2e6a2ba25ecf09e4255	30858
Detail JOJ	1min	Version 1363506100 Generated 2013-03-17 08:41:40 (-34sec) Value c0afad39c9d976f46b336f19e890f00	Version 1363506100 Generated 2013-03-17 08:41:40 (-34sec) Value c0afad39c9d976f46b336f19e890f00	Version 1361444344 Generated 2013-02-21 11:59:04 (-23d 20h) Value 9ff0dedb3bd8d92a7606f8b97ddac0d2	30856
Detail JOJPLUS	1min	Version 1363506100 Generated 2013-03-17 08:41:40 (-34sec) Value a6747bfc1696cbbf2ed7e3d4d0e13e9	Version 1363506100 Generated 2013-03-17 08:41:40 (-34sec) Value a6747bfc1696cbbf2ed7e3d4d0e13e9	Version 1361444344 Generated 2013-02-21 11:59:04 (-23d 20h) Value 7a8dd9d815a2c638e5972761b74b424	30855

Inactive keys

ID	RENEW	LATEST VERSION	OLDEST VERSION	VERSIONS
Detail TEST	1min	Version 1361374775 Generated 2013-02-20 16:39:35 (-24d 16h) Value 7232547d34f7d45a47ec016d11e34a	Version 1361284328 Generated 2013-02-19 15:32:08 (-25d 17h) Value 92d941a7b5bd5c93236c6f4cd196dfd	1468
		Version 1361374775	Version 1359374149	

Antik Monitoring Room - New Version 5.0

Software based and cost-effective and high-performance tool for IPTV monitoring

The Antik Monitoring Room is a software based and a cost-effective but high performance IPTV monitoring tool, which displays 1 or more streams on submonitors and controls their quality. Every error is displayed immediately in the Log file, where the admin can see when an incident started, ended, in which input it has occurred and its description (audio, video, blackout, etc.).



Brief introduction

- Software based and cost-effective but high-performance IPTV monitoring tool
- Supports a powerful mosaic overview for multiple services
- Supports various alarm detection to ensure QoE and QoS
- Provides a scalable pricing policy for an easy entry and extension
- UDP, RTSP protocols in format TS, RTSP, RTMP, HTTP streaming, HLS
- SNMP support

The Bluetop MultiViewer is suitable for various types of streaming media IP protocol. It can monitor audio and video alarms, display monitoring results on monitoring wall, which can provide the most effective broadcasting quality guarantee for IPTV/OTT. It supports most of the audio and video coding formats. The Buletop MultiViewer has flexible and convenient layout and configuration function, more suitable for all kinds of application scenes, and it is using GPU decoding technology, greatly improve the decoding efficiency.

Key Features

- Dual output resolution up to 1920 x 1080
- Video decoding: MPEG-1, MPEG-2, MPEG-4, H.264, H.265, AVS/AVS+
- Audio decoding: MPEG1, MPEG2, MPEG2 AAC, MPEG4 AAC, MPEG4 HE-AAC, AC-3, Dolby 5.1, DRA
- IP source: UDP, RTSP, RTMP, HTTP, HLS
- Resolution: SD, HD
- Detections: Freeze frame , black , color bar , audio loss, video loss, loudness
- Alarm: **1** OSD(on-screen visual alarm)**2** Alert tone **3** Database records **4** SNMP traps
- Log: **1** Alarm log storage **2** Query by time/ program name /error type
- Round-robin;
- Audio waveform spectrum;
- Layout too:
 - Provide templates for quick launch
 - Customization template with which customer could draw rectangles flexibly
 - Support both analogue and digital clock
 - Support GIF picture and customized text
 - Support main TV wall and secondary TV wall
- Encode: Support single program encode output and full screen encoding
 - (Video: 352*288, 720*576, 1280*720, 1920*1080 Audio: AAC MP3)

Other Features

- Web based control
- Layout tool provide templates for quick launch, also customization template with which customer could draw rectangles flexibly
- Support both Analog and digital Clock
- Support GIF picture and customized TEXT
- Support main TV wall and secondary TV wall
- Support round-robin
- Multiple rotating mosaic screens

Multicast Parallel testing for maximum speed. With default settings, StreamGuard can test 10 channels simultaneously in 3 seconds. That means 200 channels in one minute. Specified number of retries while channel is marked as offline/warning can minimize small network-related problems. Self-monitored Ajax Web-based client application allows to remotely monitor one StreamGuard probe from many locations, or monitor more StreamGuard probes in one or more locations. Web application contain indicators of browser-server connection and server process status. Channel status history tracks all status changes for downtime analysis. Sound alarm to indicate any stream downtime. Automatic channel import/synchronization from your channel database using standard XML format.

The screenshot displays the Stream Keeper Antik Core interface. At the top, there are four buttons: "Quick overview", "Probe server title", "Server daemon process indicator", and "Browser-server connection indicator". The main interface is divided into two main sections: "STATUS - OVERVIEW" and "HISTORY (200)".

STATUS - OVERVIEW

OFFLINE	WARNING	UNTESTED	ONLINE	ALL
1	1	0	185	187

Oldest test: 2010-07-19 08:40:43 (-1min) | Newest test: 2010-07-19 08:42:09 (-0min)

STATUS - CHANNELS

Channel	Status	Duration
OFFLINE (1)		
Sidisko nad Jazom	Offline	- Kbit/s - 0min
WARNING (1)		
Russian Travel Guide	Warning	36Kbit/s - 0min
ONLINE (185)		
Test	Online	6458Kbit/s - 0min
Animal Planet	Online	2703Kbit/s - 0min
Anixe (HD)	Online	2447Kbit/s - 0min
ARD	Online	2369Kbit/s - 0min
ARD (H)	Online	5151Kbit/s - 1min
ARD (H)	Online	5282Kbit/s - 0min
ARD (H)	Online	9314Kbit/s - 0min
Arte	Online	6409Kbit/s - 0min
Arte (H)	Online	10613Kbit/s - 0min
Astra 1	Online	12167Kbit/s - 1min
Autobusová stanice - Katedra	Online	2352Kbit/s - 0min
Autobusová stanice - vestibul	Online	3317Kbit/s - 0min
AXN	Online	3282Kbit/s - 1min
AXN Crime	Online	3124Kbit/s - 0min
AXN Sci-Fi	Online	2713Kbit/s - 0min
BBC Parliament	Online	4408Kbit/s - 0min

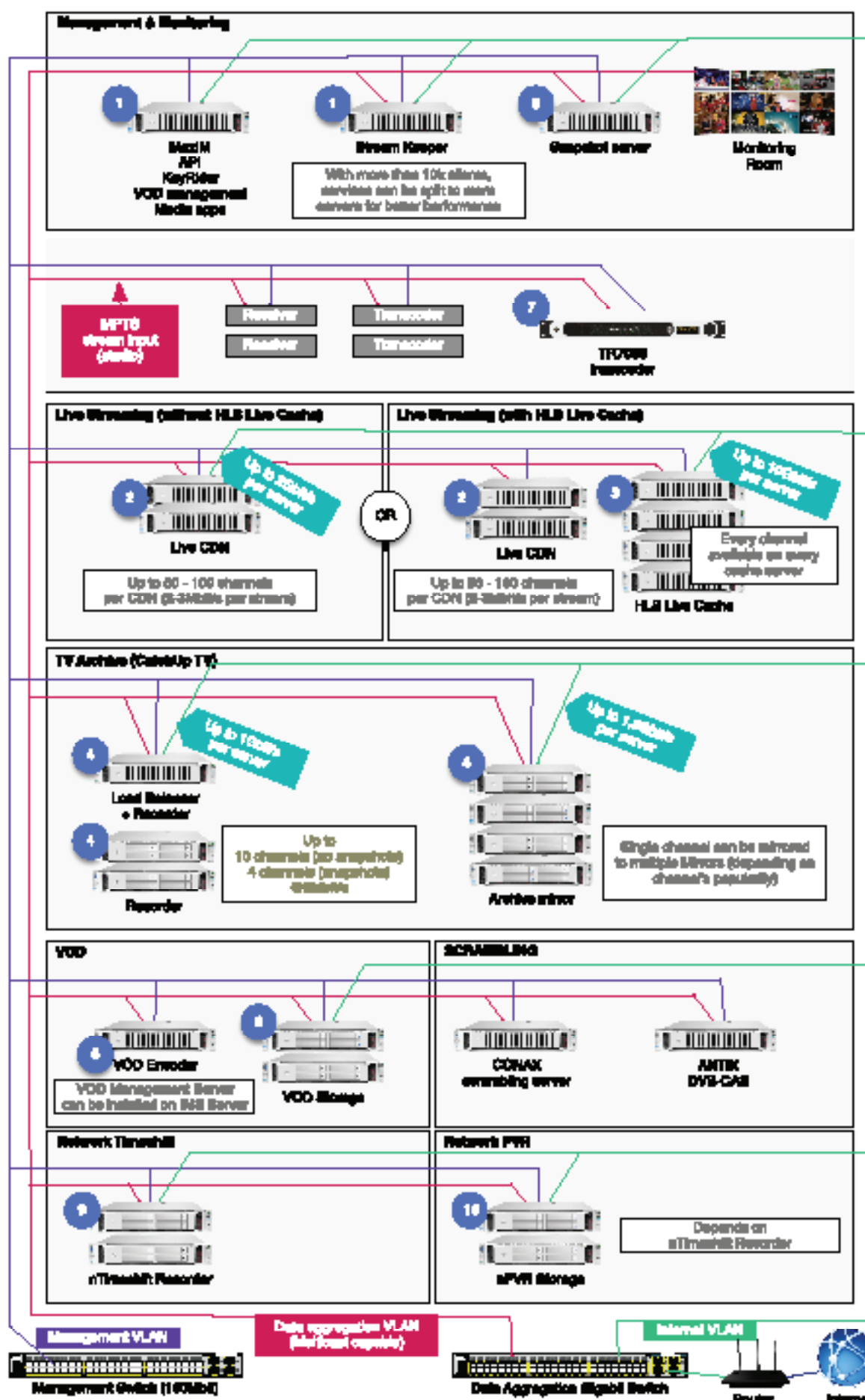
HISTORY (200)

ACT. TIME	STATUS	CHANNEL	STREAM	DURATION
Today 2010-07-19				
04:56 (-3h 45min)	Warning	AXN Crime	...	1min
04:56 (-3h 45min)	Warning	AXN Sci-Fi	...	1min
01:52 (-6h 49min)	Offline	Sidisko nad Jazom	...	1min
01:39 (-7h 0min)	Offline	AXN Crime	...	1min
00:00 (-8h 41min)	Warning	CS Film	...	6h
2010-07-18				
23:53 (-1h 48min)	Warning	AXN	...	1min
23:49 (-8h 52min)	Offline	Mozika 2	...	1h 15min
22:52 (-9h 49min)	Offline	Sidisko nad Jazom	...	1min
22:52 (-9h 49min)	Offline	AXN Sci-Fi	...	1min
22:52 (-9h 49min)	Offline	AXN Crime	...	1min
22:52 (-9h 49min)	Offline	AXN Sci-Fi	...	6h 59min
22:52 (-9h 49min)	Offline	Mozika 2	...	1min
22:52 (-9h 49min)	Offline	OS - Pa	...	1min
22:52 (-9h 49min)	Offline	Demax 2	...	1min
22:52 (-9h 49min)	Offline	Demax	...	1min
19:03 (-13h 38min)	Warning	Polonia 1	...	1min
18:49 (-13h 52min)	Warning	AXN Sci-Fi	...	1min
18:45 (-13h 56min)	Warning	Polonia 1	...	15min
17:28 (-15h 13min)	Warning	Fashion TV	...	9min
16:38 (-16h 4min)	Warning	Fashion TV	...	38min
16:35 (-16h 7min)	Warning	Fashion TV	...	1min
16:27 (-16h 14min)	Warning	AXN Sci-Fi	...	1min
16:27 (-16h 14min)	Warning	AXN Crime	...	1min
15:16 (-17h 23min)	Warning	Fashion TV	...	1min
15:15 (-17h 27min)	Warning	AXN	...	1min

Annotations:

- Quick overview:** Points to the top navigation bar.
- Probe server title:** Points to the "Stream Keeper Antik Core" title.
- Server daemon process indicator:** Points to the "SERVER WORKING (load: 2.01)" indicator.
- Browser-server connection indicator:** Points to the "REFRESH TIMER: 2, CONNECTION OK" indicator.
- Status with no indicator - this status no more latest status for given channel:** Points to the "OFFLINE (1)" section.
- Link opens stream in new browser window with embedded VLC player:** Points to the "channel status" button.
- Status duration:** Points to the "Duration" column in the history table.
- Day delimiter:** Points to the "Today 2010-07-19" header in the history table.
- Indicates that status is still active (there is no newer status for given channel):** Points to the "Warning" status in the history table.
- TOP OFFLINE CHANNELS:** Points to the "TOP OFFLINE CHANNELS" button at the bottom right.
- List of chnnls with largest downtime for last week and month:** Points to the "TOP OFFLINE CHANNELS" button at the bottom right.

Server Schematics and Configuration



Server Schematics and Configurations

Minimal
testing or low-cost setup

Warning:
using this configuration for commercial use without hardware RAID and with
slow / unreliable SATA drive can lead to service malfunction and high support
cost

Recommended
commercial use (high performance and data integrity)

Tested server (guaranteed compatibility):
HP DL 160G8 / DL 360G8 / DL380G8
RAID (if needed): P410 or P420

1	CPU: Intel Core i5 RAM: 4GB HDD: 1x 100GB SATA Ethernet: 100Mbit OS: Linux Debian 8 64bit	Up to 1000 users	CPU: Intel Xeon Dual / Quad Core RAM: 8GB HDD: 2x 300GB SATA or SAS (recommended) RAID: LSI Megaraid od HP P4XX or compatible Ethernet: 1x 1Gbit/s OS: Linux Debian 8 64bit	
2	CPU: Intel Core i5 RAM: 8GB HDD: 1x 100GB SATA Ethernet: 1Gbit/s OS: Linux Debian 8 64bit	Up to 20 channels	CPU: Intel Xeon Dual / Quad Core RAM: 16GB HDD: 2x 100GB SATA RAID: Software Ethernet: 1x or 2x 1Gbit/s OS: Linux Debian 8 64bit	Up to 100 channels
3	CPU: Intel Core i5 RAM: 8GB HDD: 1x 100GB SATA Ethernet: 1Gbit/s OS: Linux Debian 8 64bit	Up to 500 streams	CPU: Intel Xeon Quad Core RAM: 32GB HDD: 2x 100GB SATA Ethernet: up to 10Gbit/s OS: Linux Debian 8 64bit	Up to 5000 streams
4	CPU: Intel Core i5 RAM: 4GB HDD: 1x 500GB SATA Ethernet: 1Gbit/s OS: Linux Debian 8 64bit	Up to 4 channels 50 streams	CPU: Intel Xeon Quad Core RAM: 8GB HDD: 8x 300-900 GB SAS 10k RPM RAID: LSI Megaraid or HP P4XX with 512MB cache or compatible Ethernet: up to 2x 1Gbit/s OS: Linux Debian 8 64bit Note: If snapshots are enabled, 4 channels are recommended per one Quad Core Xeon	Up to 10 channels 500 streams
5	CPU: Intel Core i5 RAM: 2GB HDD: 1x 500GB SATA Ethernet: 100Mbit OS: Linux Debian 8 64bit		CPU: Intel Core i5 / i7 / Xeon RAM: 2GB HDD: 1x 1TB SATA RAID: optional OS: Linux Debian 8 64bit	
6	CPU: Intel Core i5 RAM: 4GB HDD: 1x 500GB SATA Ethernet: 1Gbit/s OS: Linux Debian 8 64bit	Up to 50 streams	CPU: Intel Xeon Dual Core RAM: 8GB HDD: min. 8x 500GB - 1TB SATA RAID: LSI Megaraid or HP P4XX with 512MB cache or compatible OS: Linux Debian 8 64bit	Up to 500 streams
7	CPU: 1.4GHz RAM: 2GB HDD: 30GB Graphic Card: support DirectX 9.0c OS: Microsoft Windows 7 Ult. 32/64bit		CPU: 1.4GHz RAM: 2GB HDD: 30GB Graphic Card: support DirectX 9.0c OS: Microsoft Windows 7 Ult. 32/64bit	
8	CPU: Intel Core i5 RAM: 8GB HDD: 1x 100GB SATA Ethernet: 1Gbit/s OS: Linux Debian 8 64bit		CPU: Intel Core i7 / Xeon RAM: 8GB HDD: 1x 100GB SATA OS: Linux Debian 8 64bit	
9	CPU: Intel Core i5 RAM: 4GB HDD: 1x 100GB SATA Ethernet: 100Mbit OS: Linux Debian 8 64bit	Up to 10 channels 50 output streams	CPU: Intel Core i7 / Xeon RAM: 16GB HDD: SSD 500GB (SATA or PCIExpress) OS: Linux Debian 8 64bit	Up to 50 channels 500 output streams
10	CPU: Intel Core i5 RAM: 4GB HDD: 1x 500GB SATA Ethernet: 100Mbit OS: Linux Debian 8 64bit	Up to 400 hours of video 50 output streams	CPU: Intel Core i7 / Xeon RAM: 16GB HDD: 20TB SATA RAID or External SAN Storage OS: Linux Debian 8 64bit	Up to 1700 hours of video 500 output streams

Antik TR 6265 Transcoder

HiDensity IP-to-IP HEVC FullHD transcoder



New ANTIK Hi-Density HW Transcoder is great for telco-grade IP-to-IP FullHD H.265 transcoding for all operators and OTT providers scenarios.

Key Features

- MPEG2
- MPEG4 part2
- H.264/AVC
- AVS

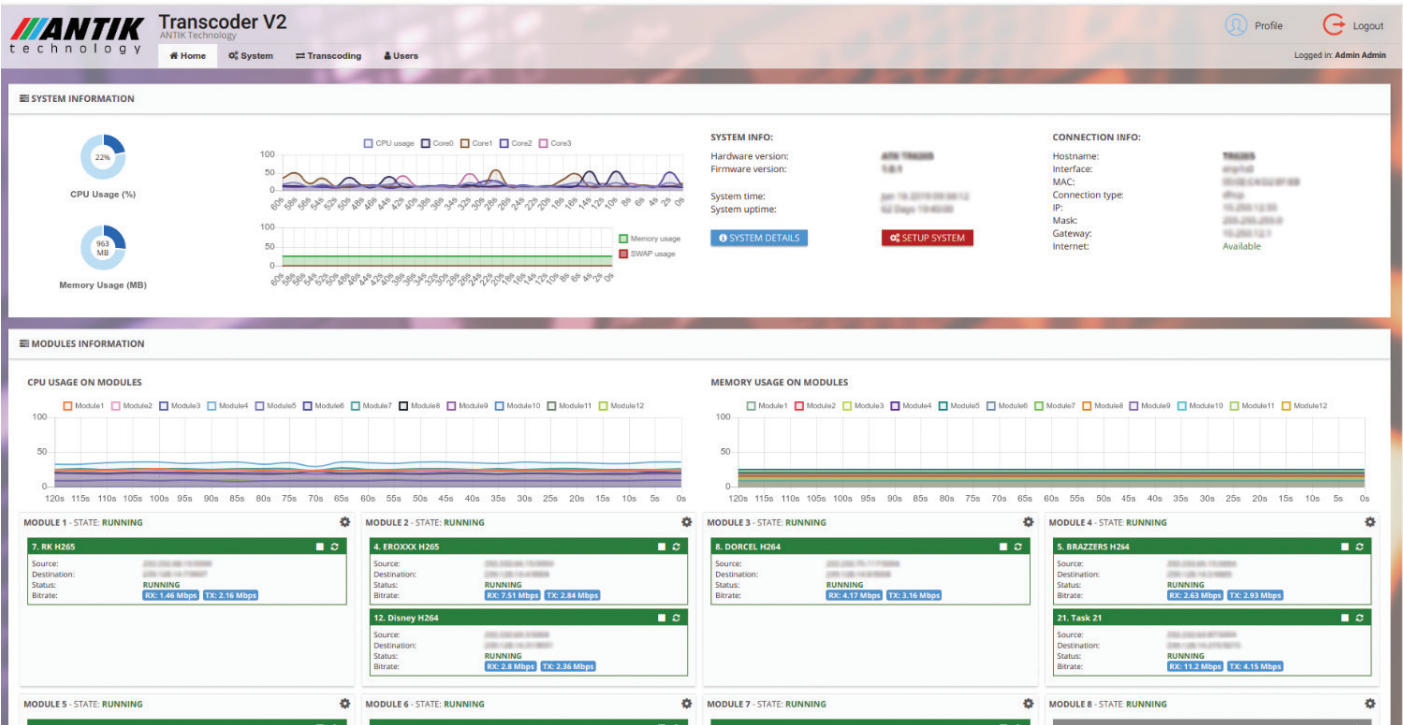
Video Encoding Specifications

- H.265 MP@level 5 main tier and H.264BP/MP/HP@level 4.2 video encoding
- maximum 12 x 1080p @ 30 fps or 24 x 720p @ 30 fps encoding
- VBR or CBR mode
- Low-delay encoding
- Encoding of multiple ROIs

Video Encoding Specifications

- H.265/HEVC (Main/Main 10 profile @ level 5.1)
- H.264/AVC (BP/MP/HP @ level 5.1)
- MPEG 4/2/1, VC - 1/WMV9, VP8/VP6, AVS, REAL 8/9/10, DivX 3/4/5/6 and some other legacy codecs

Transcoder TR6265 interface



Trancoder TR6265 task configuration

TASK CONFIGURATION

1. EROX H264 (STATUS: **RUNNING**)

BASE SETUP:

Task title: EROX H264

Slot: Module 6

Source IP address: 230.230.44.16

Source port: 8084

Source audio channel: 76

Source video channel: 76

Destination IP address: 230.230.146.5

Destination port: 8081

Output video PID: 1001

Output audio PID: 1000

CODEC SETUP:

Video codec: H264

Video resolution: 720p HD (1280x720 - 16:9)

Video profile: High

Video framerate: 25 FPS

Video bitrate: 2500

Audio codec: AAC

Audio samplerate: 48000

Audio bitrate: 192

TTL: 64

Buttons: STOP TASK, CANCEL TASK SETUP, SAVE TASK SETUP

2. EROX H265 (STATUS: **RUNNING**)

3. EROXXX H264 (STATUS: **NOT AVAILABLE**)

Detailed specifications



ITU-T H.265 Main Profile @ Level 5 main-tier encoding

- Motion compensation with 1/2 or 1/4 pixel precision
- Three prediction unit (PU) types (32 x 32, 16 x 16, 8 x 8) for intra-frame prediction
- Two PU types (16 x 16, 8 x 8) for intra-frame prediction
- Skip mode and merge mode with a maximum of two candidate points to be merged
- Three transmission unit (TU) types (16 x 16, 8 x 8, 4 x 4)
- Context-adaptive binary arithmetic coding (CABAC) entropy encoding
- De-blocking (DB) filtering
- Sample adaptive offset (SAO)
- Inter-Precessor Communications Module (IPCM) encoding

ITU-T H. 264 High Profile/Main Profile/Baseline Profile @ Level 4.2 encoding

- Motion compensation with 1/2 or 1/4 pixel precision
- Two sub-block types (16 x 16 and 8 x 8) for inter-frame prediction
- Prediction modes of intra 4 x 4, intra 8 x 8 and intra 16 x 16
- Rans 4 x 4 and trans 8 x 8
- CABAC and context-adaptive variable-length coding (CAVLC) entropy encoding
- DB filtering
- IPCM encoding

Support for multiple input image formats

- Semi-planar YCbCr4:2:0
- Planar YCbCr4:2:0
- Package YUYV

1080p @ 30 fps H.265/H.264 multi-stream encoding Configurable image resolutions

- Minimum image resolution: 128 x 128 (H.265) or 256 x 128 (H.264)
- Maximum image resolution: 1920 x 2048
- Image width or height step: 2

Region of interest (ROI) encoding

- Encoding of at most eight ROIs
- Separate enable/disable control of the encoding function for each ROI

Antik GX 5000

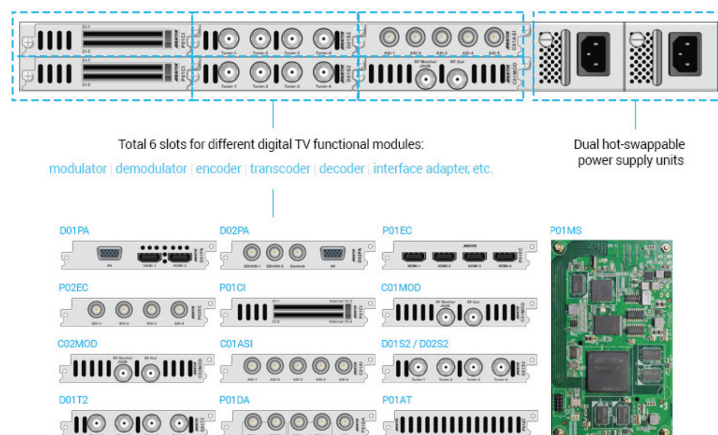
Digital Contents Processing Platform



Antik Digital Contents Processing Platform GX 5000 brings a compact, powerful and flexible solutions that allow the users to build or update DTV or IPTV headend to meet the requirements of today's new network architectures. GX 5000 is a compact 1U platform capable of processing a high number of streams. By inserting up to 6 optional functional modules and pluggable MUX/Scrambler extended modules, GX 5000 integrates all DTV headend functions, such as DVB signal reception, descrambling, encoding, transcoding, remultiplexing, scrambling and modulation into one single unit.

Key Features

- Maximum data throughput 49Gb/s
- 16 TS processors on the main board, 10Mb/s bandwidth for each TS processor
- 2SFP BbE IP ports with maximum 920Mbps input and output data rate
- Up to 256 MPTS/SPTS TS/IP input and 512 MPTS/SPTS output without IP-FEC
- Up to 24 MPTS/SPTS TS/IP input and 24 MPTS/SPTS output with IP-FEC
- PSI/SI edition and re-generation, PID re-mapping and filtering
- Control and monitoring by Front Panel, Menu, Web and SNMP
- Total 6 slots for different digital TV functional modules: modulator, demodulator, encoder, trans-coder, decoder, interface adapter, etc.
- Removable cooling fan assembly with alarm & speed control
- Dual hot-swappable power supplies units
- 1RU rack with display screen, 6 buttons, RS-232, USB



P01MS (reMUX & Scrambler Extension Module)

- 15 Gbps data processing capability
- 32 independent TS reMUX's and Scramblers
- PID filtering, remapping, pass through & mapping
- Insert & Edit PSI/SI tables
- PCR re-stamp & calibrate
- Local or remote CAS synchronous simul-crypt processing
- Self-temperature monitoring

D01T2 (4 x DVB-C/T/T2 Demodulator Module)

- 4 x F type Female, 75Ω
- Input Frequency: 48 ~ 860 MHz (DVB-C), 104 ~ 862 MHz (DVB-T2)
- Input Level: -15 ~ 15dBm (DVB-C), -70 ~ -20dBm (QEF, DVB-T/T2)
- Symbol Rate: 1 ~ 7 MSps (ITU J.83 Annex A DVB-C)
- DVB-T2 v 1.3
- Bandwidth: 6/7/8 MHz
- Input Return Loss: 7 dB

P02EC (4 x SDI In Encoder/Transcoder Module)

- 4 x SDI, BNC Type Female, 75Ω
- Audio Input: SDI Embedded
- Sampling Rate: 48 kHz
- Input: MPTS/SPTS, MPEG2 MP@ML MP@HL, MPTS/SPTS, H.264/AVC Main/High, Baseline Profile @ L4.0
- or less (but not FMO, ASO & RS of Baseline)
- Output: MPTS and/or un-stuffed TS, MPEG2 MP@ML, MPTS and/or un-stuffed TS, H.264/AVC Main/High/Baseline Profile @ L4.0 or less (but not include FMO, ASO & RS of Baseline)

P01AT (4-Way HD/SD H.265 to H.264/MPEG-2 Transcoding Module)

- Input: Compliant with H.265 /HEVC), H.264/AVC Baseline, Main & High Profile @ L4.0 or less & MPEG-2 MP@ML
- Output: MPTS and/or un-stuffed TS, MPEG2 MP@ML, MPTS and/or un-stuffed TS, H.264/AVC Main/High/Baseline Profile @ L4.0 or less (but not include FMO, ASO & RS of Baseline)

D01S2/D02S2 (4 x DVB-S/S2 Demodulator Module)

- 4 x F type Female, 75Ω
- Input Frequency Range: 950 ~ 2150 MHz
- Input level: -65 dBm ~ -25 dBm
- Symbol Rate: 2 ~ 45 MBaud (DVB-S QPSK), 2-31 MBaud (DVB-S2 8PSK)
- Roll Off factor: 0.35 (DVB-S QPSK), 0.35/0.25/0.2 (DVB-S2 8PSK)
- LNB Polarity Selection Voltage: 0, 13 V, 18 V selectable
- LNB Band Selection Tone: 0/22K selectable
- DiSEqC 1.0

P01DA (2 x DS3 Input/2 x DS3 Output/1 x ASI Adaptor Module)

- 5 x BNC Female, 75Ω
- Standard: DVB-ASI, EN50083-9 / ITU-T G.703
- Frame Structure: ITU-T G.752 / ITU-T G.804
- ASI Input or Output can be switched by Web Control
- DS3 bit rate: 44.736 Mbps

P01CI (4 x CI De-encryption Module)

- 4 x Independent Common Interface (DVB-CI) slots
- Multiple programs CSA or BISS-1/E De-encryption
- Support of CAM watchdog

C01MOD (8-carrier QAM or 2-carrier COFDM Modulator Module)

- 2 x F type Female, 75Ω(1 x main output, 1 x -20 dB monitor output)
- Support ATSC/QAM (Annex A/B)/COFDM/DTMB Modulation (Can't work simultaneously)
- ITU-T J.83 Annex A, B
- RF output range: 48 ~ 996 MHz, step by 1 KHz
- FFT Mode: 2K/4K/8K
- Symbol rate: 2.5 ~ 6.99 MBauds
- RF total output level: 80 ~ 100 dBuV
- MER > 36 dB
- Spurious rejection > 55 dB
- Output return loss -10 dB
- Spurious rejection > 55 dB
- Output return loss -10 dB

C02MOD (4-carrier Un-Adjacent Frequencies QAM/ATSC/COFDM/DTMB Modulator Module)

- 2 x F type Female, 75Ω (1 x main output, 1 x -20 dB monitor output)
- Support ATSC/QAM (Annex A/B)/COFDM/DTMB Modulation (Can't work simultaneously)
- ITU-T J.83 Annex A, B
- RF output range: 48 ~ 996 MHz, step by 1 KHz
- FFT Mode: 2K/4K/8K
- Symbol rate: 2.5 ~ 6.99 MBauds
- RF total output level: 80 ~ 100 dBuV
- MER > 36 dB
- Spurious rejection > 55 dB
- Output return loss -10 dB
- Spurious rejection > 55 dB
- Output return loss -10 dB

C01ASI (5 x ASI Input/Output Module)

- 5 x BNC Type Female, 75Ω
- Standard: DVB-ASI, EN50083-9
- Input or Output: Switched by Web Control
- Input and Output Bit Rate ≤ 216 Mb/s
- Support T2-MI

P01EC (4 x HDMI in Encoder/Transcoder Module)

- 4 x HDMI, type A
- Coding Profile & Level: H.264/AVC BLP, MP, HP @ L4.0 or less & MPEG-2 MP@ML
- Audio Input: Embedded
- Coding Standard: MPEG1 Layer II, MPEG-2/4 AAC-LC, HE-AAC (V1, V2)
- Sampling Rate: 48 KHz
- Input: MPTS/SPTS, MPEG2 MP@ML, MP@HL, MPTS/SPTS, H.264/AVC Main/High/Baseline Profile @ L4.0 or less (but not FMO, ASO & RS of Baseline)
- Output: MPTS and/or un-stuffed TS, MPEG2 MP@ML, MPTS and/or un-stuffed TS, H.264/AVC Main/High/Baseline Profile @ L4.0 or less (but not including FMO, ASO & RS of Baseline)

D01PA (2 x H.264/MPEG-2 Decoder Module)

- 2 x HDMI 1.3, 1 x D-sub 15 Female (2 pairs CVBS out adapter)
- Video Bit Rate < 50 Mb/s
- Output Level: -30 ~ + 7 dB (Adjustable, 0 dBm/600Ω)
- Closed Caption: EIA 608, EIA 708

D02PA (2 x H.264/MPEG-2 Decoder Module)

- 2 x DSI outputs, 1 x Genlock input, BNC Female 75Ω, 2 x CVBS outputs by D-sub 15 to RCA convertor
- Video Bit Rate < 50 Mb/s
- Sampling Rate: 32 KHz, 44.1 KHz, 48 KHz
- Analog Video Output: CVBS, 2 x RCA, (DB15 adapter)
- CVBS Standard: NTSC, PAL, SECAM
- CVBS Resolution: 576i x 25, 480i x 29.97
- Output Level: 1.0 Vp-p ± 5 % (with standard test stream)
- Output Impedance: 600 (Balanced)Ω
- Output Mode: Left, Right, Mono, Stereo
- Output Level: - 30 ~ + 7 dB (Adjustable, 0 dBm/600x)
- Closed Caption: EIA 608, EIA 708
- Genlock: Support
- BNC Output Mode: SDI Output/ASI Input/ASI Output can be switched by Web Control

Antik MX 5318 Receiver

8 x Tuner DVB-T/T2/C/S2/ISDB-T

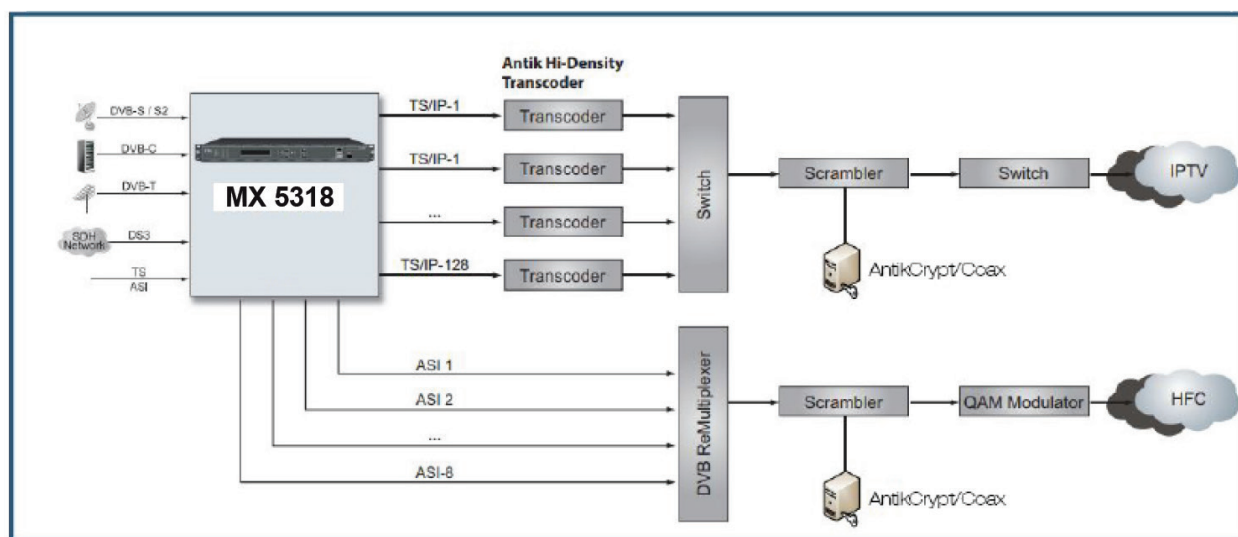


The MX-5318 is a high-density, modular and CI decryption professional TS processor equipped with 8 independent tuners, which can be any of the DVB-T/ T2, DVB-S2/S, DVB-C, DTMB, ISDB-T or ATSC type. It supports a wide range of application by combining 8 tuners processing capability with industry standard outputs including ASI and TS/ IP. The MX-5318 has 8 DVB common interface slots capable of working with the most of the well-known CAS in the market to de-crypt multiple pay TV services.

The MX-5318 provides operators with an ideal solution for multi receiving, remultiplexing, descrambling and TS over IP operations, the compact 8 tuners and the powerful 8 CI decryption design which makes it one of the most competitive products in the head-end market.

Key Features

- 8 x Tuners Input, Supports variety of input options DVB-T2/T/ S2/S/C/DTMB/ATSC/ISDB-T
- Supports DVB-S2 Input Stream Identifier (ISI, optional) and DVB-T2 Multi PLP and SFN MIP pass through
- Built-in TS re-multiplexer receives from ASI, CI Slot1 to CI Slot8 and TS/IP inputs
- 8x DVB-CI Slots, multi-program decryption, BISS-1 and BISS-E decryption
- 8x ASI output the transport stream from CI Slot1 to CI Slot8 or BISS
- 1x channel full duplex TS over IP or 9x channels IP out without IP input
- Remote Control and Supervision by SNMP v2, HTTP WEB and Proprietary HDMS software
- On Site software update through IP or USB
- RSSI, received signal strength, Eb/N0, C/N and BER monitoring
- Redundant power supply



Specifications

DVB-S/S2 Tuner Input (ISI Factory Optional)

- Connector Type 8×F type female 75Ω for Input
- Input Frequency Range 950 ~ 2150MHz
- Input Level -25 ~ -65dBm
- Symbol Rate 2 ~ 45MBaud
- Roll-off Factor (DVB-S QPSK: 0.35/DVB-S2 8PSK: 0.35, 0.25, 0.2)
- FEC Code Rate:
- DVB-S QPSK: 1/2, 2/3, 3/4, 5/6, 7/8
- DVB-S2 QPSK: 1/2, 3/5, 2/3, 3/4, 4/5, 5/6, 8/9, 9/10
- DVB-S2 8PSK: 3/5, 2/3, 3/4, 5/6, 8/9, 9/10
- LNB Polarity Selection Voltage 0, 13V, 18V selectable
- LNB Band Selection Tone 0/22KHz selectable
- Satellite Selection Command DiSEqC 1.0
- ISI ID 1 ~ 255 user configurable

DVB-C Tuner Input

- Connector Type 8×F type female 75Ω for Input
- Input Frequency Range 51 ~ 862MHz
- Input Level 51~75dBμV
- Symbol Rate 1~7MBaud (ITU J.83 Annex A)
- Constellation 16QAM, 32QAM, 64QAM, 128QAM, 256QAM
- Bandwidth 6MHz, 7MHz, 8MHz
- Input Return Loss 7dB (typ.)

DVB-T/T2 Tuner Input

- Connector Type 8×F type female 75Ω for Input
- Input Frequency 104 ~ 862MHz (VHF/UHF)
- Input Level -20 ~ -70dBm
- Constellation (DVB-T: QPSK, 16QAM, 64QAM/DVB-T2: QPSK, 16QAM, 64QAM, 256QAM)
- Bandwidth 6MHz, 7MHz, 8MHz
- FFT Mode
- DVB-T: 2K, 8K
- DVB-T2: 1K, 2K, 4K, 8K, 16K, 32K
- Guarding Interval
- DVB-T: 1/4, 1/8, 1/16, 1/32
- DVB-T2: 1/4, 5/32, 1/8, 5/64, 1/16, 1/32, 1/64, 1/128
- FEC Code Rate
- DVB-T: 1/2, 2/3, 3/4, 5/6, 7/8
- DVB-T2: 1/2, 3/5, 2/3, 3/4, 4/5, 5/6
- Input Return Loss 7dB (typ.)

DTMB Tuner Input

- Connector Type 8×F type female 75Ω for Input
- Input Frequency Range 46.5~866MHz
- Input Level -87~-29dBm
- Symbol Rate 7.56MBaud
- Bandwidth 6MHz/7MHz/8MHz
- Constellation 4QAM-NR, 4QAM, 16QAM, 32QAM, 64QAM
- Guard Interval PN420, PN595, PN945
- Roll-off Factor 0.05
- Interleaving Depth 240, 720
- FEC Code Rate 0.4, 0.6, 0.8

ATSC Tuner Input

- Connector Type 8×F type female 75Ω for Input
- Input Frequency Range 54~864MHz
- Input Level -75~-7dBm(ATSC 8VSB)
- Symbol Rate 10.762MBaud
- Constellation 8VSB
- Roll-off Factor 0.115
- Bandwidth 6MHz

TS Processing

- TS Input Management Demux and Remux among ASI, TS/IP and CI Inputs
- TS Output Management Demux and Remux for ASI output
- Service and PID Management Service and PID level for Remux, filtering and remapping
- PSI/SI PSI/SI table regeneration, NIT and SDT edition, LCN Edition and Re-generation
- Descrambler DVB Common Scrambling Algorithm (CSA)
- BISS Mode BISS-1, BISS-E
- Common Interface 8 x PCMCIA slots, compatible with major CA CAMs in the market

ASI Output

- Connector Type 9 independence BNC female, 75Ω,
- Standard DVB-ASI, EN50083-9
- Output Bit Rate ≤ 200Mb/s
- TS Processing 8xASI out pass through the TS from CI 1 to CI8, 1xASI Out from Remux

ASI Input

- Connector Type 1×BNC female, 75Ω
- Standard DVB-ASI, EN50083-9
- Input Bit Rate ≤ 100Mb/s
- Connector Type 1×BNC female, 75Ω

TS over IP

- Connector Type 1×RJ-45, 100/1000 Base-T Effective Bit Rate 200Mb/s for 9 channel IP out without IP in and IP channel 1 to IP channel 8 just pass through the TS from CI or BISS, the IP channel 9 can output the TS from ASI in or Remux. 80Mb/s for full duplex 1 channel
- Protocol UDP / RTP, Multicast / Unicast, IGMPv3, ARP

Alarm

- Connector Type 1×D-sub 9 male
- Switching Condition User Defined

Control and Monitoring

- Connector Type 1×RJ-45, 10/100 Base-T, for equipment IP Control
- Remote Control SNMP, HT T P (Web Interface), Proprietary HDMS (Headend Device Management System)
- Local Control LCD display and 6-key keypad
- Serial Port 1×RS-232 D-sub female, for debug use only
- Equipment Upgrade Embedded FTP loader, Telnet and http

Physical

- Dimension 44mm x 255mm x 430mm
- Weight 3.5kg
- Power Supply AC 90V ~ 250V, 50/60Hz
- Power Consumption 30W (exclusive of LNB power)
- Operating temperature 0~45°C
- Storage temperature -10~60°C
- Operating Humidity 10~90%, non-condensed

Certification

- EMC:
- EN 55024:1998+A1:2001+A2:2003,
- EN 55022:2006+A1:2007,
- EN 61000-3-2:2006,
- EN 61000-3-3:2008
- FCC:
- Part 15 Class B
- LVD:
- EN 60950-1:2006 + A11:2009

Antik EN 8000 Encoder

4/8-way Integrated Encoder HDMI/SDI/CVBS



ANTIK EN 8000 consists of two 4-way (total 8) H.264 / MPEG-2 encoder modules, TS reMultiplexer. All encoders are real time and independent operated. Each encoder accepts one stereo program through its HDMI (HD or SD) input, or CVBS(SD) Input. These programs encoded are multiplexed onto one Transport Stream (TS). The essential PSI/SI tables of the TS, including LCN (Logical Channel Number), are generated automatically and are editable by user. This TS Stream is also available through the TS/IP port on the front panel with 3 modes: Full Duplex, 128 IPTV & 32 IPTV with 2 RJ-45 ports. EN-800 is accommodated in a standard 1U x 19 rack mountable chassis.

Key Features

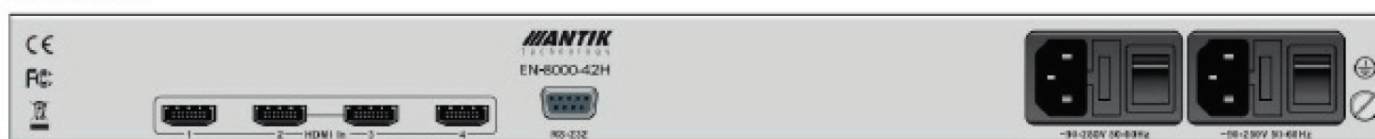
- Compliant with H.264/AVC HP@L4.0 & MPEG-2 MP@ML
- Supports MPTS & SPTS, Re-multiplexed integrated
- Total bitrate up to 400Mb/s at 128 IPTV Mode
- Total bitrate up to 200Mb/s at 32 IPTV Mode with both RJ-45 port
- Total bitrate up to 80Mb/s at Full Duplex Mode
- HD/SD Video Resolution: 1080p, 720p, 576i, 480i
- MPEG1-L2, MPEG-2/4 AAC-LC/HE-AAC Audio Encode
- Remote control/monitoring with SNMP and HTTP/Web interface
- Two Redundant Power Supplies

Back Panel Interface

EN-8000-82H



EN-8000-42H



EN-8000-82C



EN-8000-42C



Specifications

Video

- Input Interface:
HDMI, type A (EN8000, HD/SD)
RCA, 75Ω (8100, SD)
- Encode Standard:
H.264/AVC HP@L4.0&MPEG-2 MP@ML (EN8000, HD/SD)
H.264/AVC MP@L4.0&MPEG-2 MP@ML (8100, SD)
- Chrominance Sampling Format: 4:2:0
- Video Resolution & Recommend range for H.264:
1080i(1920x 1080)@25Hz, 29,97Hz, 30Hz: SMPTE274M:
1~13Mb/s
720p(1280x720)@25Hz,29,97Hz,30Hz:SMPTE296M: 1~13Mb/s
480i(720x480)@25Hz:SMPTE656M:600K~10Mb/s
56i(720x576)@25Hz:SMPTE656M:600K~8Mb/s
- Video Resolution & Recommend range for Mpeg2:
480i(720x480)@25Hz:SMPTE656M:3,5~8Mb/s
576i(720x576)@25Hz:SMPTE656M3,5~8Mb/s
- Other Output Resolution: Manually enter, Arbitrarily
- Aspect Ratio: 4:3 or 16:9, configurable

TS/IP, Mode 3: 32 IPTV Output from two RJ-45 port

- Standard: IEEE 802.3, 10/100/1000 Base-T
- Maximum Bit Rate: 200Mb/s
- Data Encapsulation: UDP, RTP, SPTS or MPTS
- Protocol: ICMP, ARP,IGMPv2/v3

Rear panel

- HDMI IN: HDMI (see model list) x 8
- CVBS & Audio IN: RCA, 75Ω (see model list) x 8

Front panel

- Control: RJ-45, 100/100 base-T x 1, USB x 1
- TS/IP: RJ-45X2, 10/100/1000 Base-T x 2; 1Back up Output only
- Display: 2 x 16 LCD module

Audio

- Input Interface:
HDMI, x8 or RCA x 8 pair
- Encode Standard:
MPEG1 Layer II
MPEG-2/4 AAC-LC, HE-AAC (V1,V2)
- Sampling Frequency: 48KHz
- Encoder Bit Rate Range
MPEG1 Layer II:32~192Kbps (Mono), 64~384Kbps (stereo)
MPEG2/4AAC-LC:24~256Kbps(Mono), 48~512Kbps (Stereo)
MPEG2/4 HE-AAC(V1/V2): 16~128Kbps (Mono), 32~256Kbps (stereo)

TS/IP, Mode 1:Full Duplex, Single TS in Single TS out

- Standard: IEEE 802.3, 10/100/1000 Base-T
- Maximum Bit Rate: 80Mb/s in + 80Mb/s out
- Data Encapsulation: UDP, RTP, SPTS or MPTS
- Protocol: ICMP, ARP,IGMPv2/v3

TS/IP, Mode 2: 128 IPTV Output Only

- Standard: IEEE 802.3, 10/100/1000 Base-T
- Maximum Bit Rate: 400Mb/s
- Data Encapsulation: UDP, RTP, SPTS or MPTS
- Protocol: ICMP, ARP,IGMPv2/v3

Others

- Inpt AC Voltage Range: AC100~ 260V 50/60Hz
- Operating Temperature: 0~40°C
- Storage Temperature: -10~60°C
- Operating Humidity: 10~90%, Non-condensed

Back Panel Interface

	Description	Encoder input	Encoder Way	TR/IP (Full Duplex/ IPTV Output)	Audio Encode (AAC)
01	EN-8000-82H	HDMI	8	Y	Y
02	EN-8000-42H	HDMI	4	Y	Y
03	EN-8000-80H	HDMI	8	N	Y
04	EN-8000-40H	HDMI	4	N	Y
05	EN-8000-82C	CVBS & Audio	8	Y	N
06	EN-8000-42C	CVBS & Audio	4	Y	N
07	EN-8000-80C	CVBS & Audio	8	N	N
08	EN-8000-40C	CVBS & Audio	4	N	N
09	EN-8000-82S	SDI	8	Y	Y
10	EN-8000-42S	SDI	4	Y	Y
11	EN-8000-80S	SDI	8	N	Y
12	EN-8000-40S	SDI	4	N	Y

Antik Nano 3

4K HDR

Hybrid/OTT IP+DVB Set-top Box



Key Features

- CPU 4 x Cortex A53 (15000 DMIPS)
- GPU Mali-450
- 4K HDR or dual Full HD decoding
- High Efficiency Compression Codecs Decoding
- Wi-Fi 802.11 ac Access Point (optional)
- Modem
- SmartHome Z-Wave (optional)
- IoT LoraWAN Gateway (optional)

Back Panel Interface



Nano 3 OTT



Nano 3 S (DVB-S2+IP)



Nano 3 C (DVB-C2+IP)



Nano 3 T (DVB-T2+IP)



Nano 3 Giga

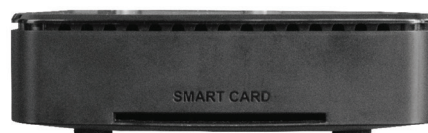


Nano 3 - 4 PORT (side panel)

Side Panel Interface



Nano 3 C/T (DVB-C2/T2+IP)



Nano 3S - side panel

Specifications

Video

- H.265/HEVC (10-bit)
- H.264/AVC
- MPEG-1/2/4
- VC-1/WMV9
- Real 8/9/10
- Divx 3/4/5/6

Audio

- AAC (HE-AAC v2 Profile)
- Dolby Digital (AC-3)
- MPEG-1/2 (layer I/II)
- MP3
- FLAC, Vorbis

Streaming

- MPEG-2 transport stream
- Multicast or Unicast
- TS over UDP
- TS over RTP
- HTTP streaming
- RTSP (with trick play support) for VoD
- Teletext and subtitles
- IGMP v2 & v3
- HLS

Inputs / Outputs

- HDMI 2.0a
- AV output (CVBS, L+R audio)
- TOSLINK (S/PDIF optical audio interface)
- 1x RJ45 (Ethernet 10/100BaseTx)
- 1x USB 3.0 + 1x USB 2.0
- CI Slot (NANO 3S)
- external IR sensor
- antenna RF input (only on selected models)

Technical Specification

- Dimensions 115mm x 115mm x 32mm (without packaging)
- Power Consumption 6W
- Power Input 12V/1A DC
- Power Adaptor 90-250V/50-60Hz AC
- Operating Temperature 0°C to 45°C
- Operating Humidity 8%-95% (non-condensing)

CAS/SCRAMBLING/DRM

- AntikCrypt
- Conax
- Widevine

Software Integration

- Operating system Linux 3.18 / 4.4
- Copy Protection HDCP 2.2
- Ekioh SVG integrated

Middleware

- ANTIK MaxIM Middleware 2.0

Accessories (optional)

- IR2 Extender cable
- AV Cable adaptor
- RCA/SCART cable
- Ethernet Cable
- Full size/Compact Keyboard
- Bluetooth Remote control
- WiFi Adapter

Application

- Telco IPTV
- Hotel IPTV
- OTT IPTV
- DTH
- Digital Signage

Hardware

- CPU: HiSilicon Hi3798MV200 4x ARM Cortex-A53 (15000 DMIPS)
- GPU: ARM Mali-450
- DRAM: 1GB DDR4
- Flash: 8GB eMMC
- Wi-Fi: 802.11 b/g/n (2.4GHz, 1T1R, 150M)
- 868 MHz SmartHome gateway (optional)
- DVB-S/S2/T/T2/C tuner (optional)
- CAS Card reader slot (optional)
- Modem
- Lorawan Gateway Optional

Hidden STB with external IR sensor

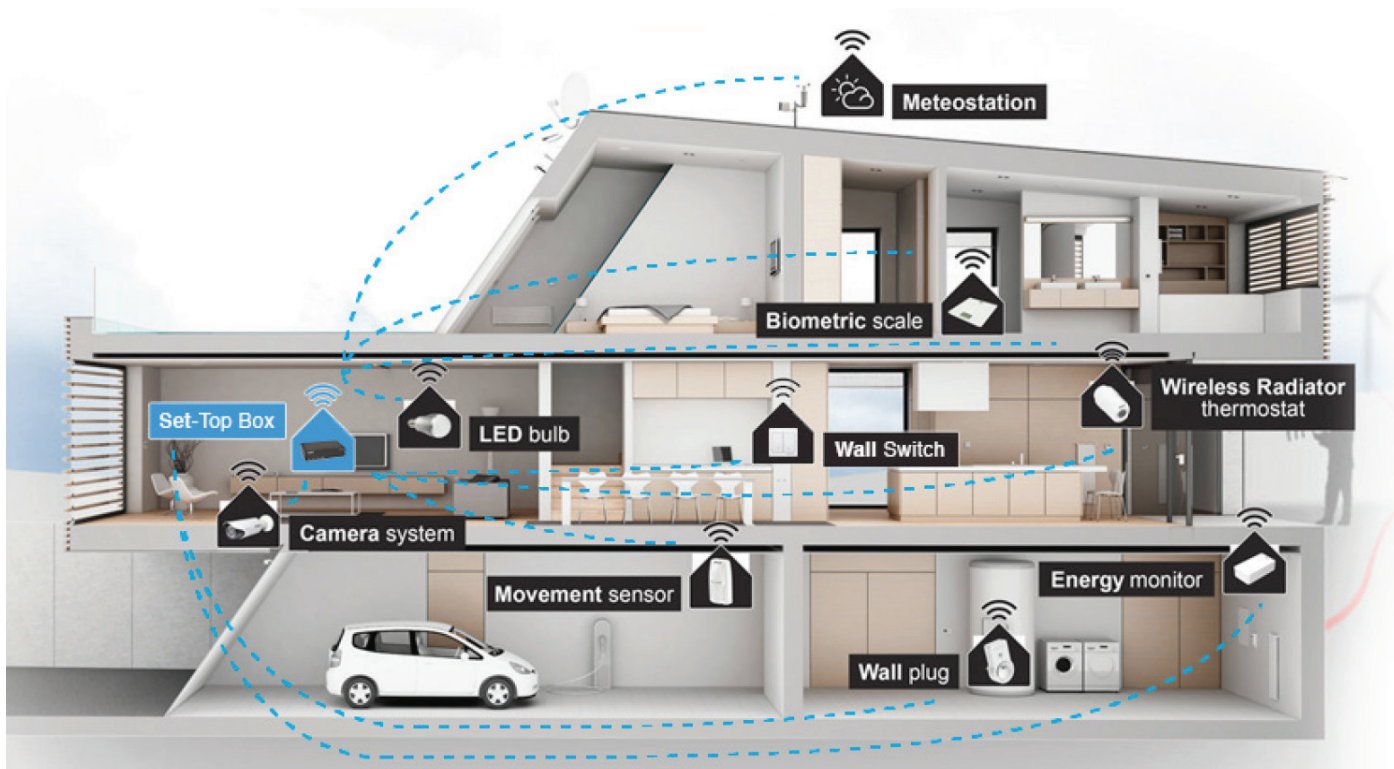
2nd IR receiver in the guest room and HDMI-CEC control



[illegible]

Antik SmartHome Systems

COMFORT and SAFETY for your customer experience



Create difference to your telco products and add state-of-art smarthome features to your multiplay offers. From remote control of lighting, heating/AC, home devices and home security to control over power and other resources consumption. Set typical usage profile and home is in a holiday mode within seconds. We are offering you the possibility to prepare for winter unexpected home arrival simply by activating heating and lights on the access road by app. The most important places, movement tracking, temperature sensor, water and gas leakage and more can be monitored in real time...security component of ANTIK Smart Home solution. Antik is continuously developing and improving its own set-top boxes with integrated Smart Home system. The communication of devices is enabled directly through Antik Mini3 set-top box with embedded Smart Home.



COMFORT



SECURITY



HEALTH



ENERGY SAVING

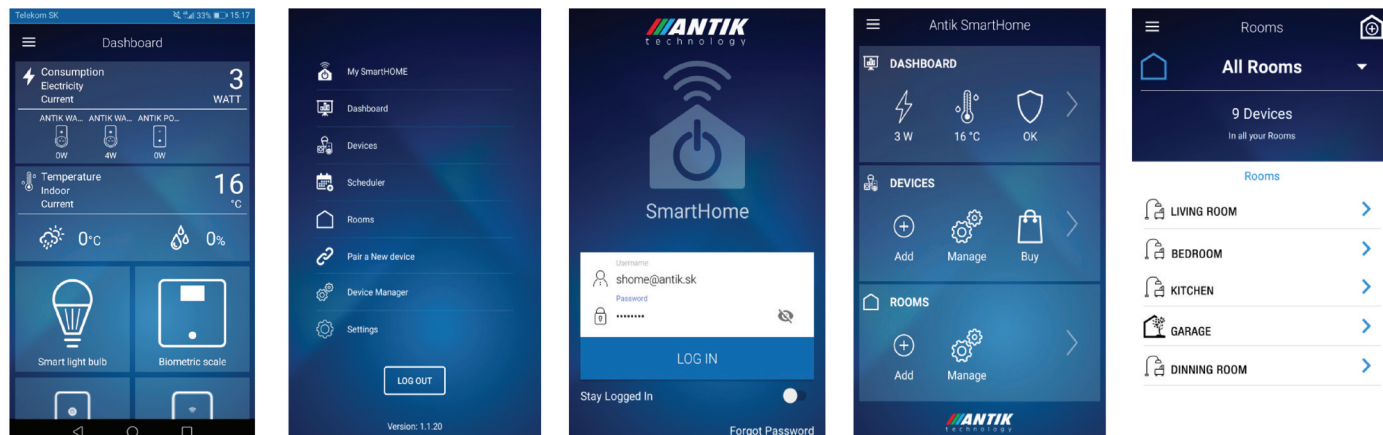
You can access and manage your SmartHome devices through web portal, mobile application or set-top box.

Set-top box



Mobile Application

Have your household under the control no matter where you are with SmartHome app. With app, you can manage and monitor your power consumption, plan turning on and off the wall switch, as well as to control movement sensor and others. To monitor your lifestyle with Antik Biometric Scale you won't have troubles anymore. You can easily download it for Android or iOS systems and you will connect it with Antik Mini 2, Mini 3 or Nano 3, which are embedded with Antik SmartHome Hub.



Download ANTIK SmartHome app.

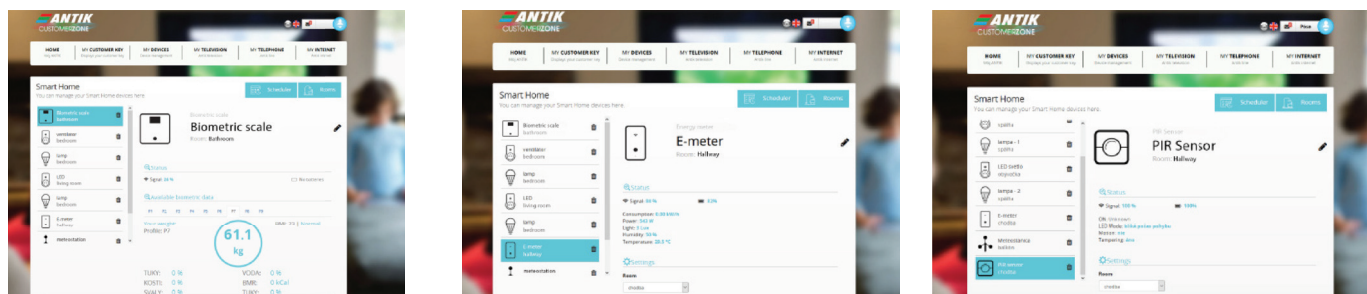


iOS



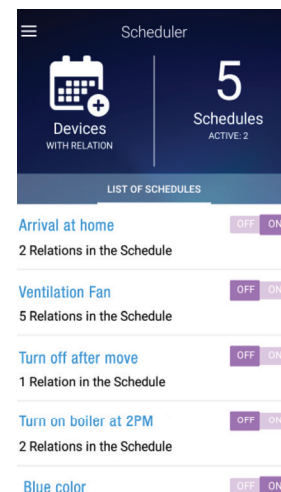
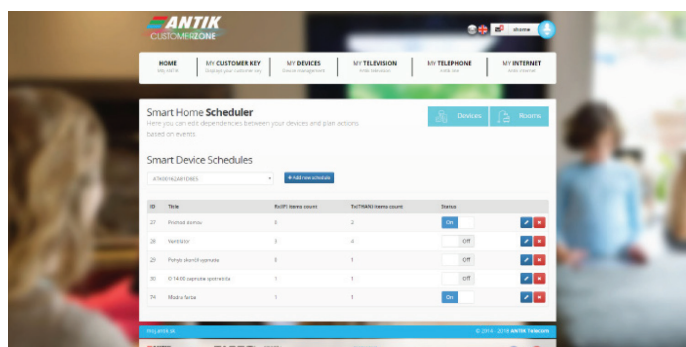
Android

Web Portal



Scheduler

With Scheduler, you can manage all the relations between your devices through any computer or tablet connected to internet, as well as to plan the actions based on the events or time. Create your own scenario Plan to change the color of Smart LED Bulb in case Movement Sensor detects somebody arriving, or change the temperature of your household with wireless radiator thermostat in case it cools under 25°C. If your lights turn on at six o'clock you can be sure you won't oversleep for work again.



Antik IP Wi-Fi/LTE Camera System

Antik video surveillance with Wi-Fi technology solution brings every moment and every detail about your family to your smart phones and tablets. Both, indoors and outdoors, provide solution to keep you connected to ensure you will not miss any precious moment in your family and ensure you about safety of your home.

ANTIK SmartCAM SCI 10

- HD resolution – 1,3 MP
- IR 10m
- 120° horizontal view angle
- Two-way audio
- Micro SD card memory



ANTIK SmartCAM SCI 55

- Full HD resolution - 3MP
- IR 10m
- 95° horizontal view angle
- Two-way audio
- Digital input/output
- Micro SD card memory or cloud
- Interior camera



ANTIK SmartCAM SCI 15

- HD resolution - 1,3 MP
- IR 10m
- Horizontal rotation: 0-355°, tilt: 90°
- Two-way audio
- Micro SD card memory or cloud
- Interior



ANTIK SmartCAM SCE 35

- HD resolution – 1,3 MP
- IR 30m
- 72° horizontal view angle
- Micro SD card memory or cloud
- Exterior, IP 67



ANTIK SmartCAM SCE 30

- HD resolution - 1,3 MP
- IR 30m
- 72° horizontal view angle
- Micro SD card memory or cloud
- Exterior, IP 67



Antik SmartCAM SCE 40

- HD Resolution – 2MP
- IR 10 m
- Field of View: 111 (H), 58 (V), 133 (D)
- 16 x digital zoom
- Micro SD card memory
- Exterior



ANTIK SmartCAM SCE 50

- Full HD resolution 1080p
- Horizontal rotation: 0-355°, tilt: 90°
- Micro SD card memory or cloud
- Exterior IP 66, IK 10



Antik SmartCAM SCI 05

- HD Resolution – 2 MP
- IR 10 m
- 8 x digital zoom
- Field of view: 115 (H), 62 (V), 137 (D)
- Two-way audio
- Micro SD card memory
- Interior



Antik SmartCAM SCI 20

- HD Resolution: 2 MP
- IR 10 m
- Horizontal rotation: 355, tilt 90
- 3 x digital zoom
- Two-Way Audio
- Micro SD card memory
- Interior camera



Antik SmartBell ASB 30

- HD Resolution – 2Mp
- IR sensor 5m
- Field of View – 140 (H), 158 (D)
- 2-way bidirectional talk
- Micro SD cloud memory



Antik SmartBell ASB 31

- HD Resolution -2MP
- IR sensor 5m
- Field of View: 140 (H), 158 D)
- 2-way bidirectional talk
- Micro SD card memory



Antik SmartRecord ASR 10/11

- 4/8 Channel IP Camera Input
- HDMI/VGA video out
- Max 80Mbps Wired input



ANTIK SmartRecord AS1101

- Max 80Mbps incoming bandwidth
- HDMI/VGA video output
- Support 1 SATA HDD, 2 USB2.0
- MIMO – support of faster connection



ANTIK SmartCAM SCI 85

- Full HD resolution 1080p
- IR 30m
- Horizontal rotation: 0-355°, tilt: 90°
- 4x optical zoom
- Micro SD card memory or cloud
- Interior



Antik SmartCAM SCE 55

- HD Resolution – 2MP
- IR 10m
- Field of View: 115 (H), 62 (V), 137 (D)
- 8 x digital zoom
- Two-way audio
- Micro SD card memory
- Exterior



SmartCam Mobile Application



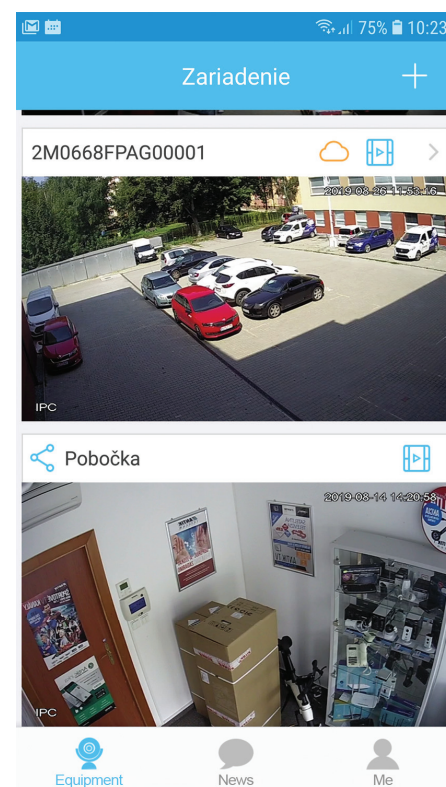
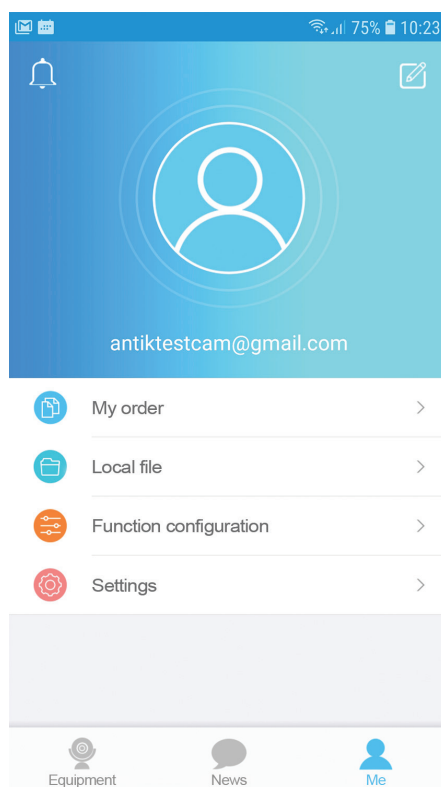
App Store



Android



Indoor and outdoor wireless camera system from Antik will provide an overview of any event or details in your home. With Antik SmartCam App you are not only able to check the security of your home or your restfully sleeping child, but you can also remind yourself unrepeatable moments with your family.



Do you want to enjoy an evening movie without waking up your baby sleeping next door? After pairing with the set-top box Antik, camera will alert you about every movement in the room directly on your TV screen or you can watch both, TV and camera screen at the same time (in a smaller window).



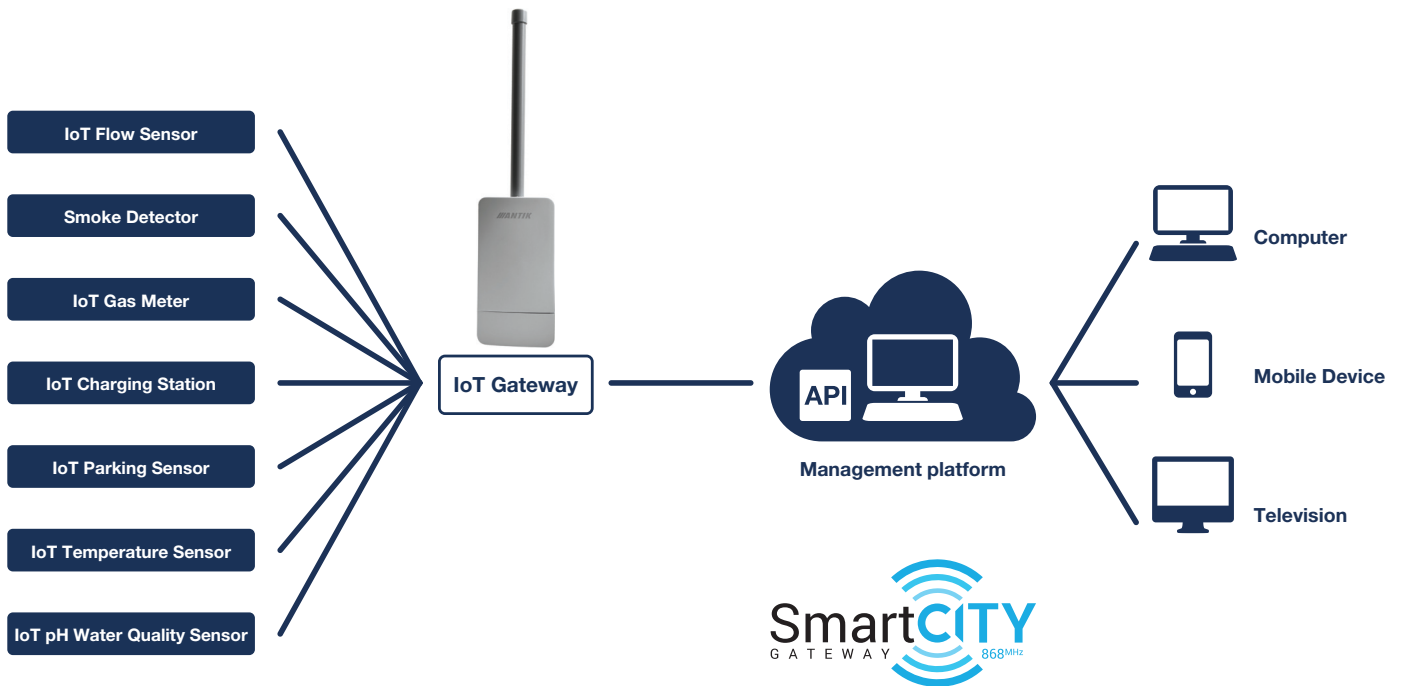
End-2-End IoT/SMART City Platform



The need for smart city solution has been mandated by urbanization and growing importance of information and communication technologies. Beside it is improving the quality of citizens life, Smart City is also future enabler in accelerating economic growth.

Smart City rely on everything being connected to each other. Antik’s portfolio of smart city products use digital, informational and communication technologies and it ranges from traffic and waste management optimisation of energy consumption to home and public safety.

Antik Technology’s solutions are in the hands of its own inhouse research and development team that is responsible for software development (sensor firmware, back-end cloud management, API interface to 3rd parties front-ends) and hardware design - IoT Gateways and sensors itself. Besides own production we offer professional consulting services.



Antik SmartCity Network Infrastructure Gateways

Antik SmartCity Infrastructure brings to your community everything need to upgrade it to SMART level. Durable Antik LoRaWAN Transmitters, Management Platform and easy integration to any 3rd party system covers the city or region with unbeatable data connection for all ultra-narrow-band scenarios for incredible costs.

Benefits

- Large coverage with low CAPEX
- Quick network roll-out
- 10 years lifetime of sensor without battery change
- Ideal for areas without power grid and data networks



ANTIK SCN 10

- Omnidirectional LoRaWAN Transmitter
- Gigabit ethernet Interface to connect to Antik SmartCity cloud



ANTIK SCN 20

- Omnidirectional LoRaWAN Transmitter
- Solar power and battery
- 3G/4G modem to connect to Antik SmartCity cloud

Key Features

- 802.3af PoE powered, typical consumption 10W
- Mast mount, IP54 enclosure
- Omnidirectional +3dBi antenna
- 470/868/915MHz frequency bands
- Support 8 channels
- Sensitivity -142dBm
- Output power up to 23dBm
- Range up to 15km (line of sight)
- Operational temperature range -40 to 80°C



Cloud Management System

It categorizes all elements of the network (sensors based on clients or projects).

- Seamlessly enable collected data via state of art API
- API allows to flexibly integrate and 3rd party analytic or processing software or visualization platform such as smartphone, tablets, PC's or digital signage

All data are pre-processed for visualisation or control databases. Various authorization options. High level of security on the way from sensors to cloud, inside cloud and on delivery to 3rd party applications. Each device uses its own keys, it is authenticated by QR code which after authorization by system the devices are allowed to communicate with cloud.

Key Features

- **Compact design**
- **Smart measurement**
- **Borderless usage flexibility**
- **Close to zero power consumption**
- **No service operation**
- **Smart dependences definition across devices**
- **Network Monitoring System**

Consulting

- IoT Rollout strategy
- IoT network Topology Plan
- Strategies for integration 3rd parties hardware design
- IoT software Analyzes
- PoC - various option for piloting and proofed concepts

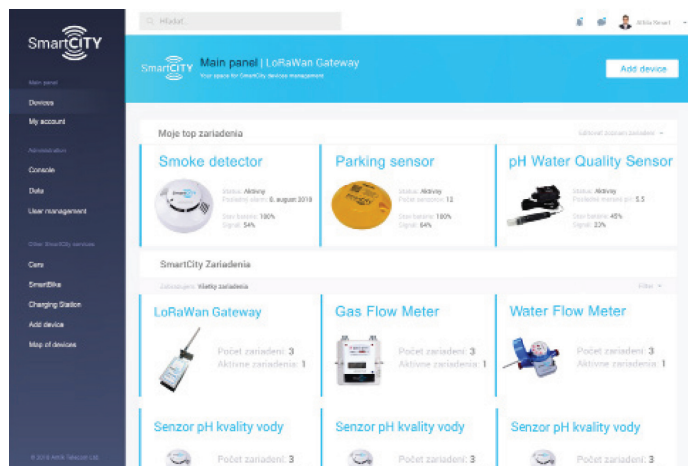
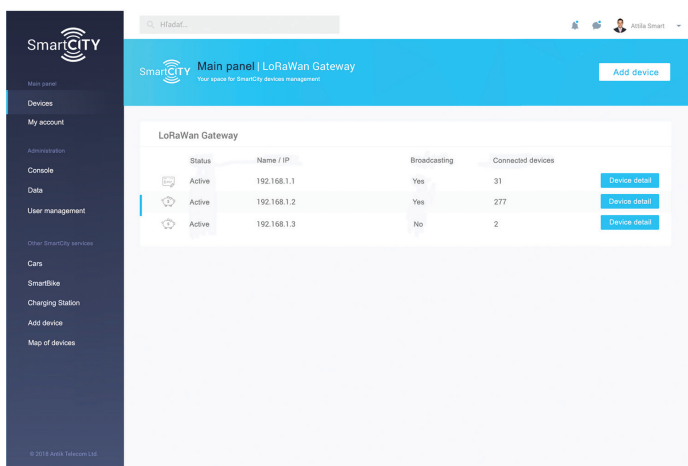
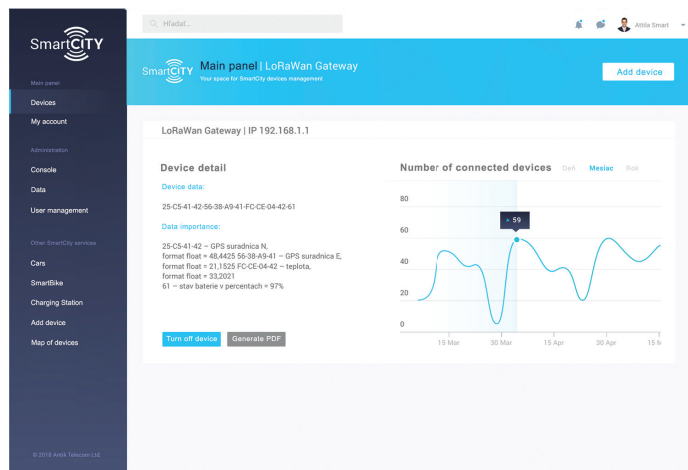
AntikLoRaWAN Tester

Antik LoRaWAN Tester is a practical device to measure SmartCity/LoT availability



SmartCity User Interface

Monitoring and managing cities is more seamless with the new user interface for management system released by Antik Technology. The system offers help to customers with tracking traffic conditions, monitor energy usage, check water quality and even predict when certain assets- such as lifts and water pumps are due to.



Use Cases

Transparent parking

The parking sensor has a wide usage Besides directing a driver to the nearest parking space you can ensure that ruthless driver won't occupy the access roads for fire brigades or VIP parking lot.



Traffic Light Control

With low cost of Antik SmartCity Network operation you can easy control city-wide traffic light system from centralised location.

Simplify traffic flow

If there is reconstruction on the roads, so city has to close the streets, road signs can easily advice drivers days and hours when it is closed. It will also navigate them where to go.

More Accurate control of Air Pollution

You can monitor and analyse important parameters of the air as temperature, humidity, dust, CO, CO2 and others. The low costs of Antik SmartCity sensors and network operation enables your city to monitor environment at street level to deliver to your citizens precise information.



Improved data collection for better air quality monitoring

Sensor are easy to install and so cheap to run that an entire city can be covered, enabling dozens of metrics to be tracked such as humidity, temperature, air quality and more. With increased availability of data, it's easy to build interactive, real-time mapping of air pollution and improve pollution prediction.

Waste Management

A full or overturned container won't surprise you anymore. In that event it will immediately sends alert to company responsible for collection. It presents double victory, satisfied citizen and effective company that can follow the history and effectively plan replacing of container according the needs.



Optimized refuse collection routes

Collection routes can be optimized to save time, energy and money with low-power connected sensors that indicate the level of waste in dumpsters. The sensors also provide valuable data about dumpster usage, emptying cycles and more.

Smart Cameras

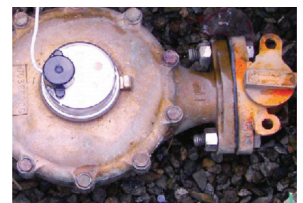
Cameras can secure that your parking lot won't be occupied by anybody else. If it detects car with another vehicle licence number it will notify you and the police.

Safety on the Streets

Make sure, that objects are at their places. E. g. you can control, if the hatches or fire protection equipment haven't disappear or the cables are not dropped and so increase the safety. In case abnormal movement happens, sensor sends notification, so you can arrange quick action.

Collect consumption data effortlessly

Put an end to manual on-site meter readings and data-processing of water, gas and electricity consumption. You can now monitor and optimize your remote assets in real-time, detecting issues such as leaks and breakdowns. Service companies can also automate billing and remotely activate and deactivate services. IoT enabled meters can transmit data immediately with no pairing or configuration required and no need to replace or recharge batteries for years.



Tap Water Monitoring

Water is irreplaceable, so we have to monitor the quality of water. Sensor is suitable for monitoring water, chemical leakage detection, water pollution, corrosion prevention and sedimentation, evaluation of quality condition for aquatic animals and plants.

SmartCity Elements



Parking sensors

Antik LoRaWan parking sensor, the solution for Smart Cities that allows citizens to detect available parking spots. Antik LoRaWan parking sensor monitors parking lot uses high sensitivity geomagnetic sensor, which measures all changes of magnetic field above the sensor. The device is manufactured in two variants: 1. surface mount variant – easy to deploy, no need to dig holes to the road surface 2. buried variant – need hole in road surface, takes little more time to deploy, but final solution is more robust and resistant against winter time road maintenance.



Street Light Module

To manage street lighting is important part of modern smart cities. Antik LoRaWan Street light control unit brings way how to control lights using LoRaWan protocol. Module has IP68 coverage and standard ANSI C136.41 connector. Device uses DALI protocol to control LED lamp driver. There is also embedded energy meter to measure actual and longtime consumption of whole lamp. GPS module provides exact time information for scheduled operations. Ambient light sensor provides information for autonomous operation depend of actual lights conditions.



Industry sensors platform

Antik LoRaWan Industry sensors device is platform to collect data from standard industry sensors powered from 12 to 24V equipped with RS485 bus and MODBUS communication protocol. Device is designed to be powered from primary lithium batteries or with solar panel rechargeable batteries. Device is able to read-out data from multiple sensors and transmit collected data in configurable interval. Typical types of sensors: Temperature, Pressure, Water quality (PH sensor, Dissolved Oxygen sensor), Ultrasonic water level sensors etc.



Trash Bin Sensor

One of the key role for “Smart City” is to find the efficient way how to get rid of the trash to maintain clean city. Antik LoRaWan Trash Can monitor, uses ultrasonic sensors to detect level of trash in waste bin. Sensor can be used for waste management company to plan optimal path for trash collecting cars.



Temperature and Humidity Sensor

Antik LoRaWan Temperature and Humidity sensor is designed for outdoor and indoor use. It uses very precise digital sensor with 0.1°C and 0.5% RH resolution. Industrial enclosure provides IP54 coverage rating. Internal lithium battery guarantees sensor life time up to 10 years.



Wall Plug Smart City

SmartCity Wall Plug is remotely controlled devices with you can easily detect in case of power is down. It also measures the power consumption, so you can see what has the highest consumption.



SmartCity Elements

Electricity Meter

Antik LoRaWan Energy Metering device is designed to sense information about energy consumption from any type of energy meter used in house or flats. Energy meter status is periodically transmitted.



Gas Meter

Antik LoRaWan Gas Metering device is designed to count pulses from pulse output of gas meter. Gas meter status is periodically transmitted.



Indoor Air Quality Sensor

Fully autonomous device which measures temperature, humidity, CO2 and aromatic particles in the air. Equipped with low consumption eINK display and longlife battery.



Water Level Sensor

Antik LoRaWan Water level sensor monitors level of water in rivers, lakes or other water reservoirs. Sensor sends alert in case water reaches maximum level.



Water Meter

Antik LoRaWan Water Metering device is designed to use with pulse output water meters. Device counts pulses from two independent water meters. Water meters status is periodically transmitted.



SmartCity Security

Basic

ATK-B201-MIRP+

Static bullet 2Mpx camera with night vision max. 60 m and with the option to set focal length.



ATK-D201-MIRP

Static dome 2Mpx camera with night vision max. 60 m and with the option to set focal length.



ATK-HSD201-IRP+

High-speed rotating 2Mpx camera with 25-times option to zoom and with night vision up to 100 m.



ATK-X201-IRP+

Camera with panoramic view of an area with the viewing angle up to 180° and with night vision up to 30 m.



ATK-LPR201-IRP

Camera with functionality of reading vehicle licence plate within 10 m, suitable for example for car parks.



ATK-NVR1601-4K

Recorder with the ability to connect 16 cameras with smart image processing features for basic cameras.



ATK-K01

Basic model of control keyboard for controlling ANTIK cameras.



Extended

ATK-B401-MIRP

Static bullet 4Mpx camera with night vision up to 50 m and with the option to set focal length.



ATK-D401-MIRP

Static dome 4Mpx camera with night vision up to 50 m and with the option to set focal length.



ATK-HSD401-IRP+

High-speed rotating 4Mpx camera with 30-times option to zoom and with night vision up to 100 m.



ATK-X301-IRP+

Camera intended to count people going in and out of the area with night vision up to 10 m.



ATK-LPR202-IRP

Camera with the ability to read vehicle license plates from one traffic lane with max. speed up to 200 km/hour.



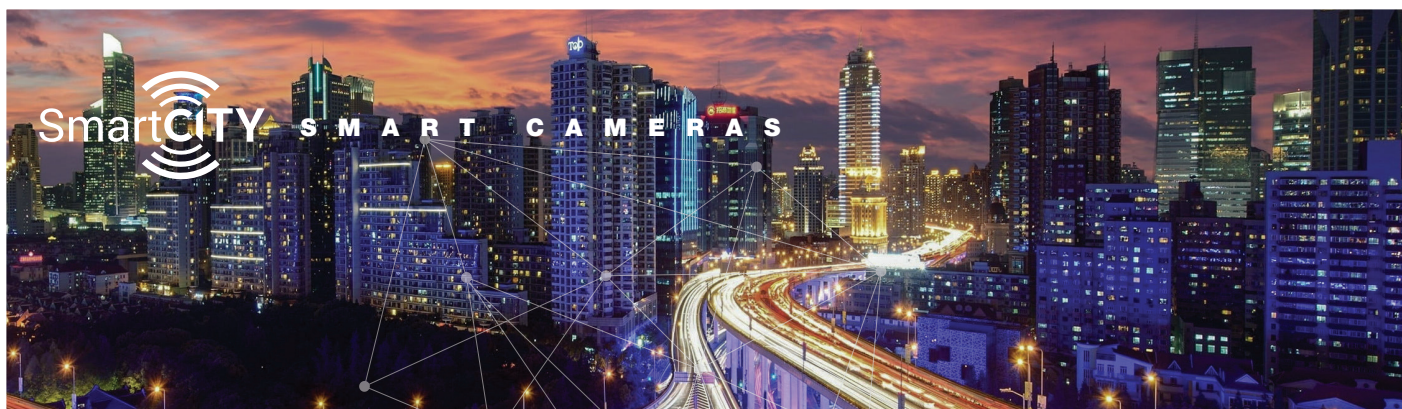
ATK-NVR1602-4K

Recorder with the ability to connect 16 cameras with smart image processing for extended cameras.



ATK-K02

The highest model of control keyboard for controlling ANTIK cameras with touch monitor and additional keyboard.



Antik Charging Station

Considering scarce energy resources and increasing pollution concerns, interest in use electric vehicles also increases. As people need to find the way to keep their cars on the move, Antik brings a new charging management platform, billing and variety of chargers.



**Power Socket
Nano-E**



**Charging station
E-Chiron-X**



**Charging station
E-Chiron Signage**

Charging station type	EVSE mode 1	EVSE mode 3	EVSE mode 3
Charging connector	1x CEE 7 / 4 16A	1x 22kW AC Type 2 / 4 16A	1x / 2x IEC Type2
Maximum output	3,6kW	7,4W/22kW	7,4W/22kW
Connectivity	LoRaWAN/NB-IoT	LoRaWAN/NB-IoT	4G/Ethernet
User interface	LED	LED	55 inch LCD
Operating temperatures	-20 to +60 °C	-20 to +60 °C	-20 to +60 °C
Electrical connection	1 x 16A	3 x 32A	3 x 63A
Protection rating	IP66	IP54	IP54
Built in 230V outlet	Yes	Yes	Yes
Electric car	-	Yes	Yes
Electric bike	Yes	Yes	Yes
Electric motorbike	Yes	Yes	Yes
Complies with regulations for MH SR grant for electric chargers for municipalities	-	Yes	Yes



SCC-EV-DC-180M



SCC-EV-DC-120

Specific input voltage	380VAC ± 15%	380VAC
Output voltage	200-500/350-700VDC	200-500/350-700VDC
Output power	30kW, 60kW, 120kW, 180kW	30kW, 60kW, 120kW
Input frequency	50Hz ± 10%	50Hz ± 10%
Short-circuit protection	Yes	Yes
Overheat protection	Yes	Yes
Battery discharge protection	Yes	Yes
IP Rating	IP55	IP54
Working temperature	-25°C ~ 55°C	-25°C ~ 55°C
Ambient humidity	90°C	90°C



Antik SmartCity E-move

Unique design of electric SmartCity bike is great option for comfortable moving across the city. You can get to school or to work at the speed up to 25 km/h and drive up to 45 km per one charge. Thanks to its low weight and simple folding it is easy to fit to every car and it is ideal vehicle to use at vacation. You can choose from two colour variants, white and black.



	Model 250W	Model 350W
Dimensions (unfolded)	1200mm*615mm*985mm	1200mm*615mm*985mm
Dimensions (folded)	1235mm*536mm*270mm	1235mm*536mm*270mm
Weight	≤ 18 kg	≤ 18 kg
Load capacity	≤ 120 kg	≤ 120 kg
Max. speed	20 km/h	25 km/h
Endurance distance	35 - 45 km	35 - 45 km
Charging time	3 - 5 h	3 - 5 h
Battery capacity	8.8AH	8.7AH
Battery type	Lithium	Lithium
Rated voltage	36V	48V
Rated power	250W	350W
Engine type	Brushless motor with gears	Brushless motor with gears
Torque	6.6 N.M	6.6 N.M
Protection against overrun	13A ± 1A	13A ± 1A
Protection against voltage	30 ± 1V	40 ± 1V

B2B E-mobility

Range of electric scooter is highly adaptable and well suited to long distance, heavy duty and large loading delivery purposes – a real work horse. Provides exceptional value and an excellent business solution for businesses requiring high performance electric delivery vehicles.

- Delivery
- Sharing
- Security

Delivery



Sharing



Local Police



Super SOCO VT-100LD



Electric Driving System		Batteries	
Max. power	4000W	Max. range	75-80 km per battery
Max. speed	80 km/h	Battery type	Lithium (removable)
Motor type	Hub motor	Battery capacity	48V/102Ah
Max. climbing angle	14°	Charging time	5-6 hours
		Charger	90V-240VAC
Measurement		Features	
Wheel base	1410 mm	Lights	LED (front, rear, flashing)
L*W*H*	1905 x 720 x 1140 mm	Display	LCD
Ground clearance	150 mm	Brake system	CBS
Front Wheel	130/60 - 13 inches tubeless	Remote key	2 pieces
Max. loading weight	160 kg		

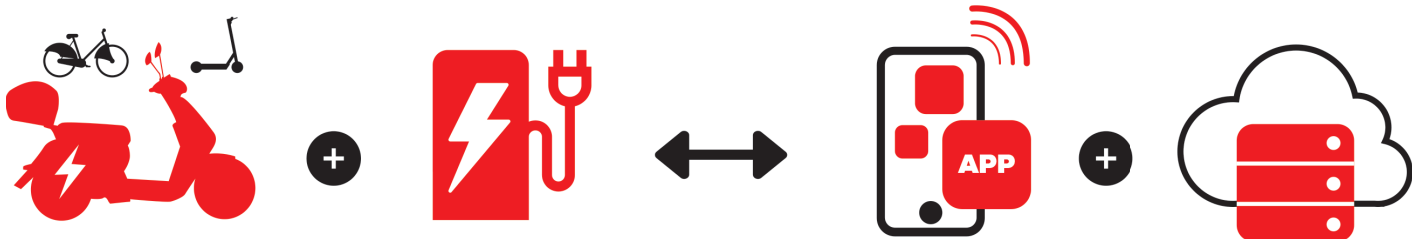
Antik Smart Mobility

Everything you need to lanch your own sharing today

ANTIK Technology® paves the way for a future of mobility which is smarter, more efficient and importantly, emission-free. We provide an entire mobility-sharing solution for your company's specific fleet requirements that includes custom charging infrastructure, customised e-vehicle fleet, a personalized mobile app, and a management backend.



Custom-tailored full package solution



EMOBILITY FLEET

City Bike Sharing
City E-bike Sharing
Mountain E-bike Sharing
E-scooter Sharing
E-moped Sharing
E-motorcycle Sharing
Canoe & Kayak Sharing

CHARGING INFRASTRUCTURE

ECHIRON-X CHARGING STATION
ECHIRON-T CHARGING STATION
ECHIRON-SIGNAGE EV CHARGING STATION
NANO-E 230V POWER SOCKET
POWERBANK SHARING

CUSTOMIZED APP

We develop a personalized end-to-end APP that incorporates a payment gateway. Choose your colors, artwork, language, vehicle types and charging infrastructure.

ADMINISTRATIVE BACK-END

Cloud application
Device monitoring, fleet tracking & remote control, maintenance management, operational data statistics, secure connection, pricing & tariffs, manage notifications, analytics & reporting etc.

Antik Smart Mobility

Select your vehicles



E-BIKE



E-SCOOTER



E-KAYAK



MOUNTAIN E-BIKE



E-MOPED



E-MOTORCYCLE

Your brand, your colors, your visibility

Custom ANTIK City Bikes are designed for a small, medium or large scale bike sharing schemes where **reliability and low-maintenance characteristics are essential**. We design, develop and build the type of mobility sharing you're looking for, from private city bike sharing schemes for businesses and corporations, to public city bike sharing for major city systems. Request a quote for a personalized ready-to-go, super-stylish and maintenance-free fleet that your customers will fall in love with, today.

- Delivery
- Sharing
- Security



Customizable elements of the bike

- Choose your base color
- Your brand's logos
- Smart 4G lock
- Custom artwork and design



Antik Smart Mobility

Custom sharing App

The overall appearance of the APP, as well as the main features, are customized to best reflect the brand of your business. Amaze your customers with a wide range of innovative features and an elegant, intuitive user interface.

Features:

- QR scan function
- Secure on-line payment
- Map of vehicles and charging stations
- User profile settings
- Ride history and payment history
- Subscriptions charges

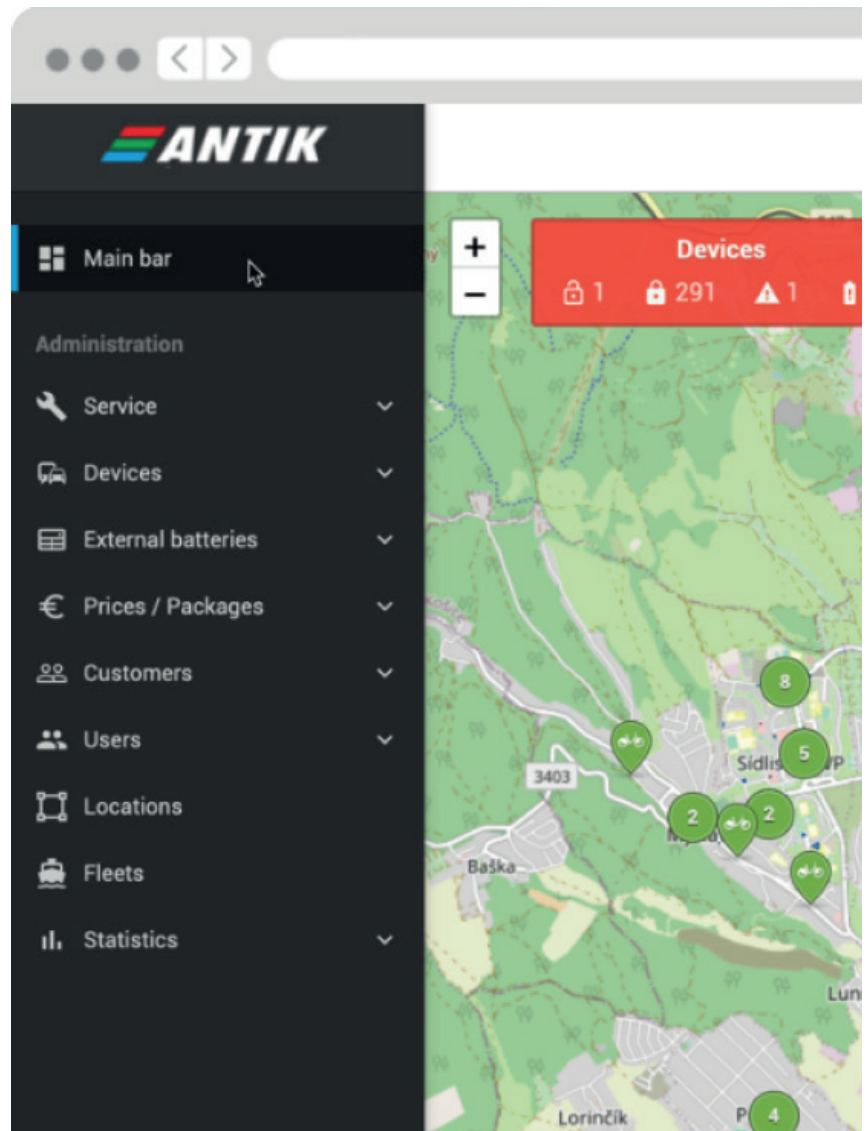


Back-end managing software and API

Administrative back-end

Cloud application, device monitoring, fleet tracking & remote control, maintenance management, operational data statistics, secure connection, pricing & tariffs, manage notifications, analytics & reporting etc.

- Admin panel dashboard
- Manage your fleet
- Track your fleet
- Manage users
- Manage promotions
- Manage notifications
- Manage pricing and tariffs
- Analytics and reporting



[illegible]

Antik Hospitality Suite



Integrated PMS:

- Opera
- Comanche
- Horec
- Hores
- Hotel Time
- Samsung
- IDS
- Fidelio

- Guest room interactive TV
- Event navigation
- Digital Signage
- Guest APP
- Housekeeping management

New!

SAMSUNG TV EN
Hospitality app for
Stb-less experience!

Top-level entertainment for you guests

- Crystal clear HD/4K TV channels
- Welcome screen
- All guest services on TV screen
- Hotel bill, Food ordering, Messaged and more
- On-demand movies
- Catch-up TV
- Content Management System
- Internet apps + Mediaplayer
- Quick setup
- Weather
- Sightseeing info

FULLY
CUSTOMIZABLE
DESIGN

ORACLE®

Validated Integration

Oracle Hospitality

HD/4K TV, latest entertainment options, top guest experience

Antik Hospitality delivers easy to set-up turnkey head-end and room premises equipment for live TV integrated with all premises related services and entertainment options. Using Antik HD set-top boxes you can be sure about future-proof media solution fulfilling highest guest expectations.



All-Property Content Distribution

Single system to manage and deliver advertising, information, upsell and public awareness information throughout the property. All your conference rooms rented to major event organizer? With one button click distribute their promos to all your public premises displays, even show it during boot-up of guest rooms TV sets. Major sport event during dinner time? Easy switch your display remotely to specific liveTV channel while displaying your corporate client ads or upsell promo other times of the day.

- In-room TVs
- Lift displays
- Restaurant TVs
- Lobby&Public Premises
- Outdoor Displays
- Conference Premises Screens

All Guest Services on TV screen

Antik Hospitality IPTV brings all your hospitality offers on your guests TV Screen. 24/7 available, easy understandable multilanguage interface increases the chance to sell your food service, relaxation, sightseeing and business guest products. All easy to setup and modify without any need of complicated coding or development.



Top-Notch Fun Features

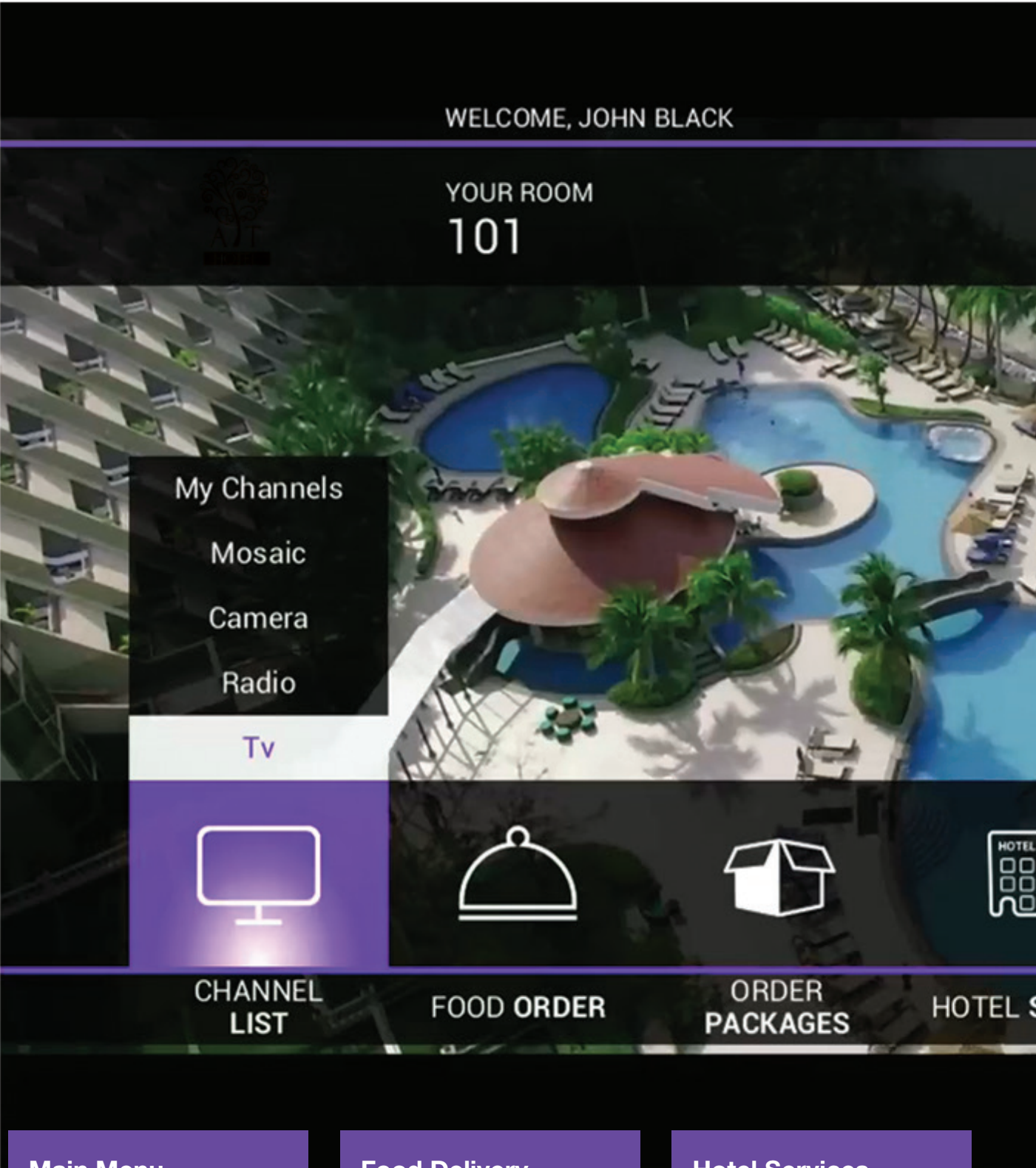
Perfect to keep your guest entertained any time of the day. Latest HD movies, local sightseeing information, or using USB media player to allow guests to view latest pictures from the busy day spent on attractions media player to share hotel entertainment database or guests USB storage to allow them to view latest pictures from the busy day spent on attractions. Instant access to web browser and most viewed apps - youtube, facebook, etc.



IPTV Management Server MaxIM

The Antik Technology presents a professional cost-effective SW solution for a seamless management of your Antik set-top box and Mobile Application network. MaxIM is the corner stone of Antik Middleware Server Family. You can easily define your channel packages, configure all or only selected customers' STBs, collaborate with other part of the Antik Server Family such as Antik Archive Servers, Antik Mosaic Servers and VoD servers. The MaxIM management server SW can be easily connected to your billing or to the customer care application, so that your users' set-top boxes will be automatically activated and monitored using the same software your employees are familiar with.





Main Menu

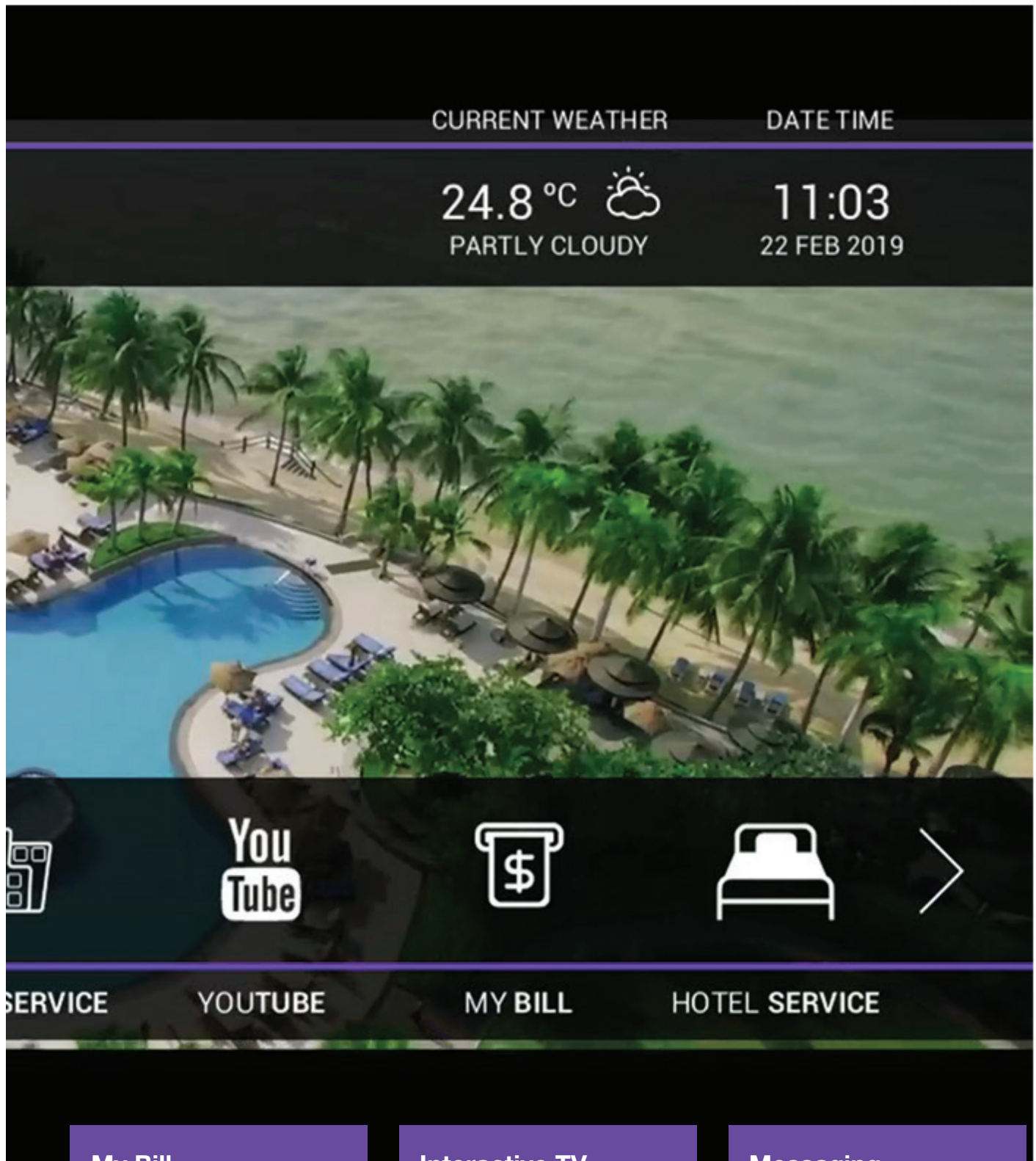
Easy to navigate customisable interface with direct access to food delivery, video on demand, my bill and other upsell and cross-sell options.

Food Delivery

All your room-service offer is now available via guest TV set. The only thing that a guest has to do is select food option and confirm by OK button. All guest requests appear on reception dashboard or in your hotel system instantly.

Hotel Services

Hotel can easily add or remove its products and services - from wakeup calls, through massages, restaurant or tours reservations to taxi orders. Everything is managed by content management system and the result appears without any intermediary work on guests TV sets.



My Bill

Thanks to integration with your hotel PMS, all guest orders ordered through IPTV or other hotel departments will appear on one simple table for guest to review before check-out.

Interactive TV

UHD TV, Electronic Program Guide, timeshifted TV and movies on demand all on your guest room screens. Media Player, web access and internet apps will complete the guest experience.

Messaging

All messages from reception appear on TV screens immediately. Older messages are stored in guests inbox on TV, notifications as well as scrolling messages are available too.

Antik Hotel App



Antik Hotel App brings all hotel services directly in smartphones or tablets of your guests.

Immediate response to all requests of your guests to make sure they are comfortable, without appearing invasive and compromising their enjoyment of their stay is a must. Earn your bonus in the form of increased customer engagement and revenue growth!

- Mass messages
- Orders
- Reception services
- Live chat
- Feedback
- Social networks
- After stay promotion
- Language selection
- Staff efficiency

Antik Hotel App has the solution

Maximize guests' spending

Upsell your services and earn additional revenue from services provided by hotel.

Gather guests' feedback

Learn how guests feel about your hotel and its services and eliminate negative reviews.

Address your guests in real time

No posters, no brochures. Communicate with your guests immediately.

Build long-term relationship

Address your guests after check-out and make them come to your hotel again!



Antik Digital Signage Solution

Comprehensive Multimedia Advertising Delivery System



Key Features

- Complex advertising delivery system
- Combination of live TV streams with standard multimedia designing components available
- Large variety of indoor & outdoor LED TV panels
- Low power consumption
- HD & Full HD resolution
- Low operational costs

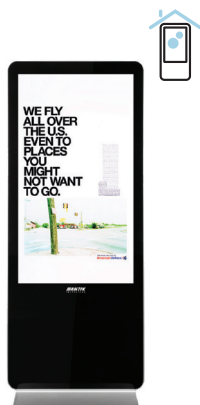
TV and many years in IPTV, we created low-investment and low operational costs LED panel system controlled by state-of-art ANTIK DS Management System MaxIM. You can either upload ready to publish campaign delivered by your advertising clients or build your own campaign. To design the campaign, all standard multimedia components can be used – pictures, music, video (even in combination with live TV channel broadcasting) all mixed with many eye-catching effects.

TV panels itself are controlled by low-power Antik DS set-top boxes. In comparison to Intel PC based panels, in each project you save significant investment money, not mentioning dramatically lower power consumption and quiet operation (no fan on set-top box necessary).



Totem 55" vertical indoor

Typical power consumption: 250 W
Screen size: 139 cm (55")
Inputs: HDMI, CVBS, DVI, TOSLINK
Weight: 95 kg
Dimensions: 2040 x 960 x 350 mm
Use Cases: 4Hotel Lobby, conference centres Navigation, Shopping Mall Corridors Advertising



Totem 42" vertical indoor

Typical power consumption: 240 W
Screen size: 106 cm (42")
Inputs: HDMI, CVBS, DVI, TOSLINK
Weight: 70 kg
Dimensions: 2005 x 805 x 350mm
Use Cases: Hotel Lobby, Conference centres Navigation, Shopping Mall Corridors Advertising



Leaflet holder 26" vertical indoor

Typical power consumption: 65 W
Screen size: 66 cm (26")
Inputs: HDMI, CVBS, DVI, TOSLINK
Weight: 50 kg
Dimensions: 1850 x 750 x 610 mm
Use Cases: Retail Shops, Exhibition Stands



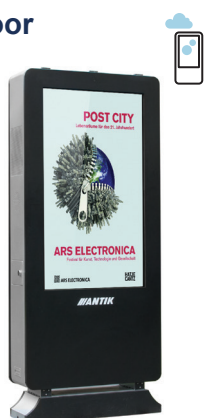
Totem 47" single-screen outdoor

Typical power consumption: 120 W
Screen size: 119 cm (47")
Inputs: HDMI, DVI, VGA, USB
Weight: 150 kg
Dimensions: 800 x 230 x 1800 mm
Use Cases: Office/Public Building Entrances, Public Places Advertising



Totem 55" dual-screen outdoor

Typical power consumption: 600 W
Screen size: 139 cm (55")
Inputs: HDMI, DVI, VGA, USB
Weight: 220 kg
Dimensions: 880 x 300 x 1950 mm
Use Cases: Office/Public Building Entrances, Public Places Advertising



Totem 55" single-screen outdoor

Typical power consumption: 600 W
Screen size: 139 cm (55")
Inputs: HDMI, DVI, VGA, USB
Weight: 220 kg
Dimensions: 880 x 300 x 1950 mm
Use Cases: Office/Public Building Entrances, Public Places Advertising



Wall-mount 10"/19" horizontal panel indoor

Typical power consumption: 35 W
Screen size: 25 cm (10")/(48 cm (19")
Inputs: HDMI, CVBS, DVI, TOSLINK
Weight: 11 kg
Dimensions: 467 x 315 x 42 mm
Use Cases: Conference Room Schedule, Office Corridors Navigation



Wall-mount 42" horizontal panel indoor

Typical power consumption: 240 W
Screen size: 106 cm (42")
Inputs: HDMI, CVBS, DVI, TOSLINK
Weight: 38 kg
Dimensions: 1075 x 335 x 150 mm
Use Cases: Retail shops Advertising, Hote Lobby Navigation



Antik Event Navigation System

State-of-Art digital content delivery system to improve your vision experience

Key Features

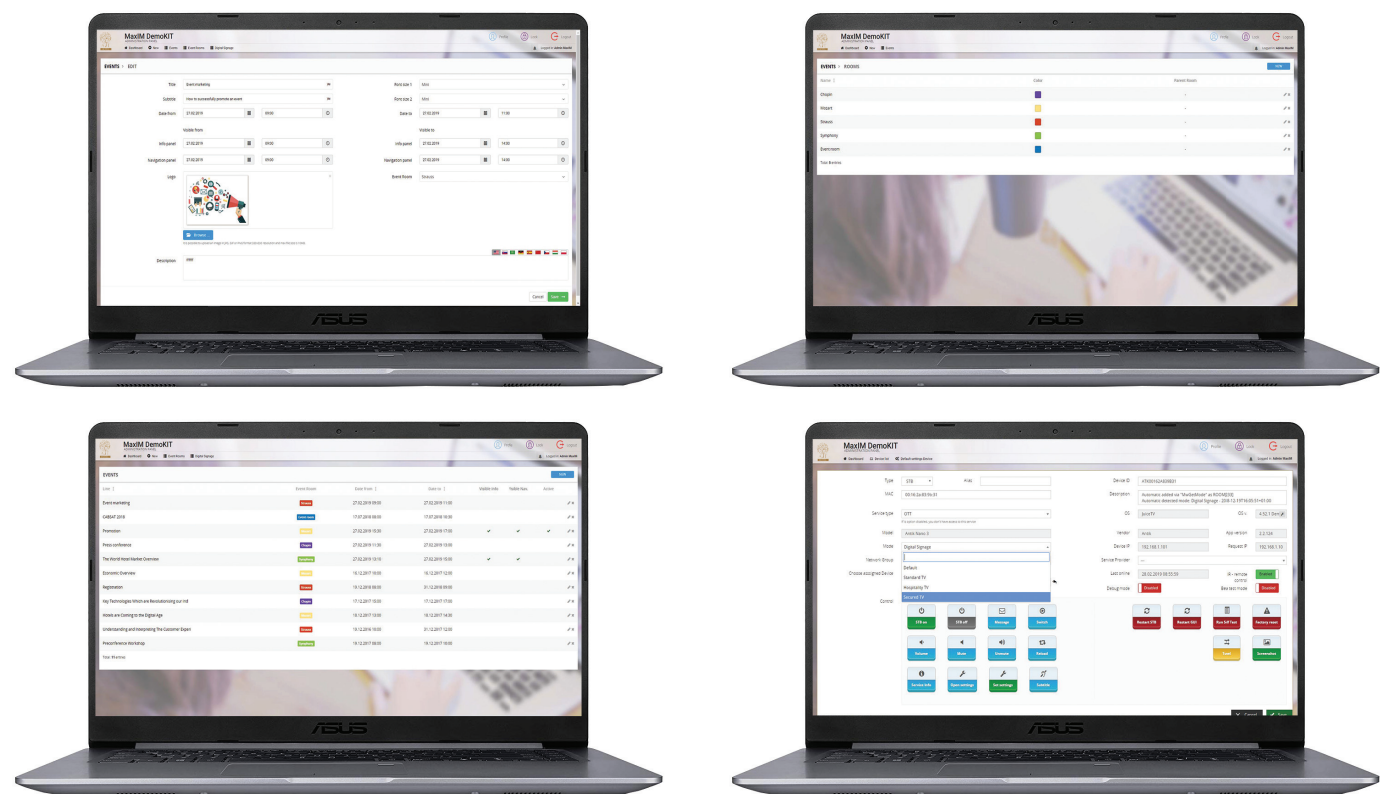
- Flexible event planning tool
- Variety of visual templates
- Easy adaptable to your visual identity
- Remote control of end-points
- Mixed digital signage and navigation roles
- Indoor and outdoor durable HD screens
- Weather info, world clock and other metadata

Content Management System MaxIM

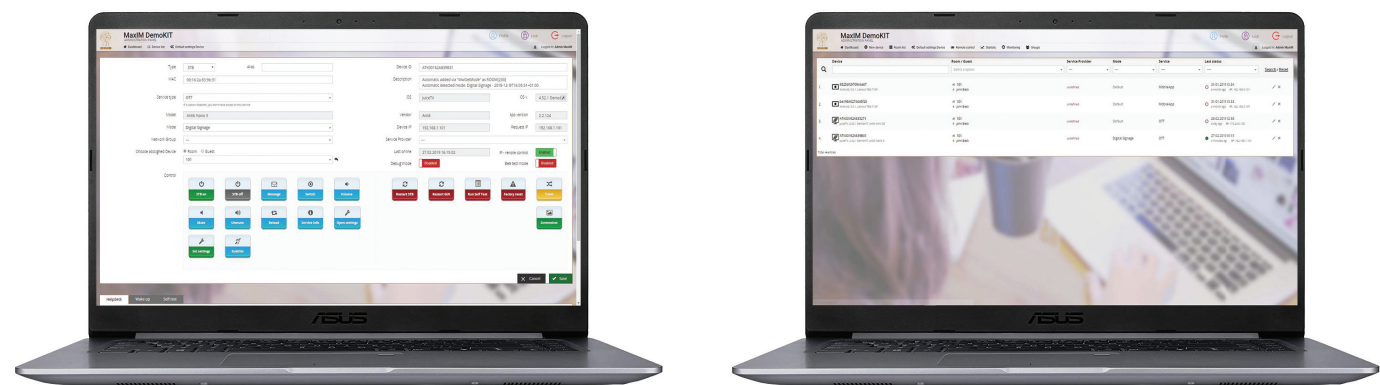
Manage the information displayed on navigation panels. Make sure your guests get right guidance to be on time at the right meeting point. Easy operation enables very fast content update.



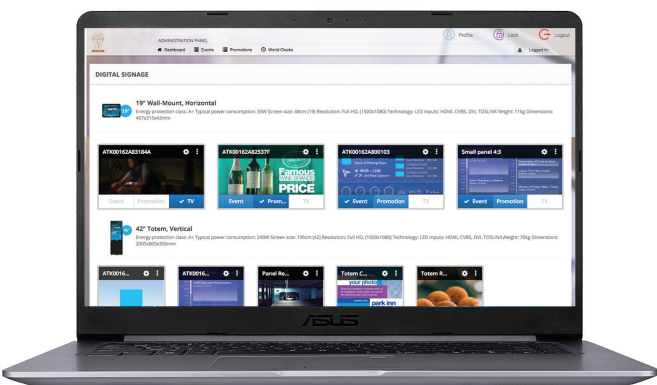
Event planning tool



Remote screen control



One-click change of screen role

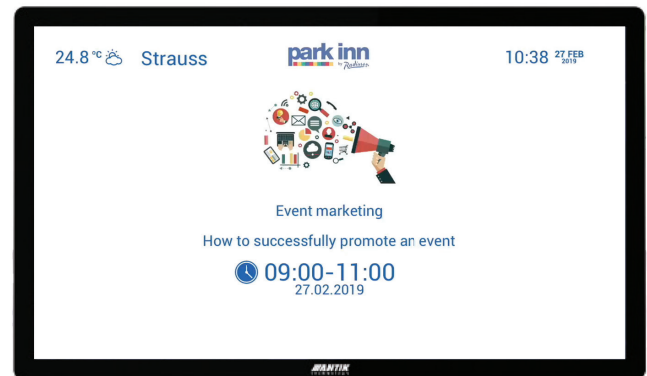


Variety of templates

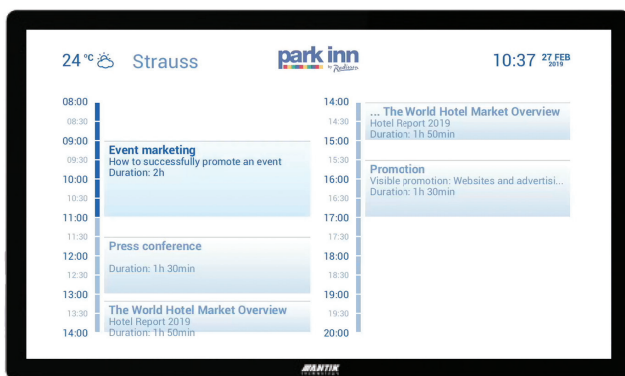
Navigation totem



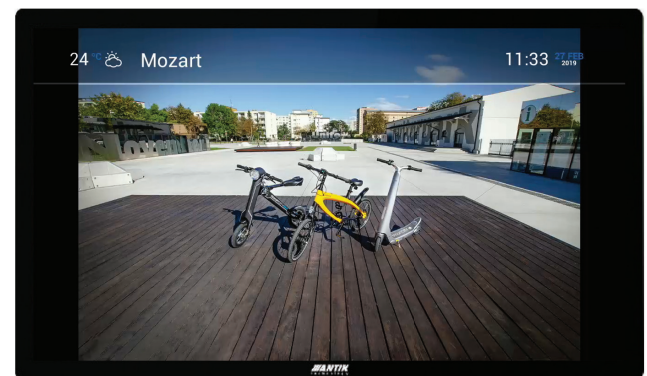
Room entrance screen



Room entrance daily schedule



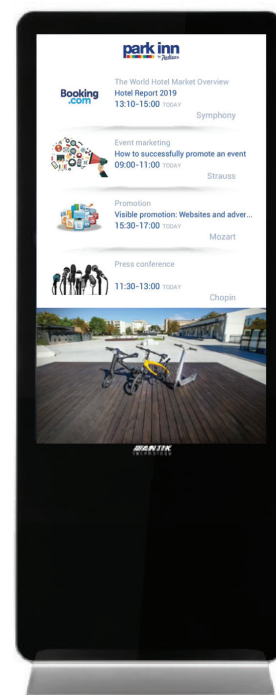
Room entrance with advertising



Vertical navigation screen



Vertical navigation totem combined with advertising



Antik Housekeeping and Facility management

Smart cleaning and maintenance under control-anywhere



Antik Housekeeping and Facility Management helps you to bring your guest satisfaction to another level. Fully integrated to your PMS, system check data about room occupancy and based on your own predefined templates creates every day cleaning tasks – automatically! It allows you to copy typical chambermaids room allocation from any day from the past to simplify your morning routines. Due to the system flexibility you can add manual tasks anytime. On the simple dashboard you can follow, what is the cleaning and inspection status of the rooms. System automatically reports to PMS when the room is done, so next guest can be checked-in quickly – without unnecessary waiting in the lobby. Your inspectors and managers can overlook the situation from any place as the interface is easily readable on tablets or any other smart devices – no need to return back to the office. Based on your selection, housekeepers can confirm their tasks either on guest room TV sets or via smartphone applications. SOS button for chambermaids to bring attention in unusual situations.

Key Features

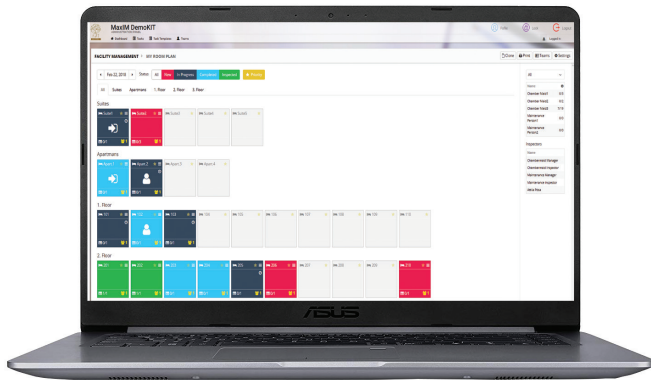
- Automated housekeeping tasks planning tool
- Personnel task allocation cloning to simplify daily routines
- Daily tasks status under control in dashboard
- Repeating cleaning tasks templates definition tool
- Fully integrated to major PMS
- Room maintenance tasks queues
- PC, Tablet, SmartPhone and TV apps for managers, inspectors, maintenance and housekeepers

ORACLE®

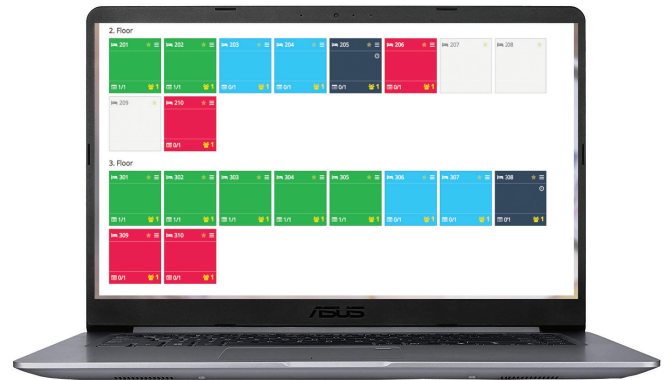
Validated Integration

Oracle Hospitality

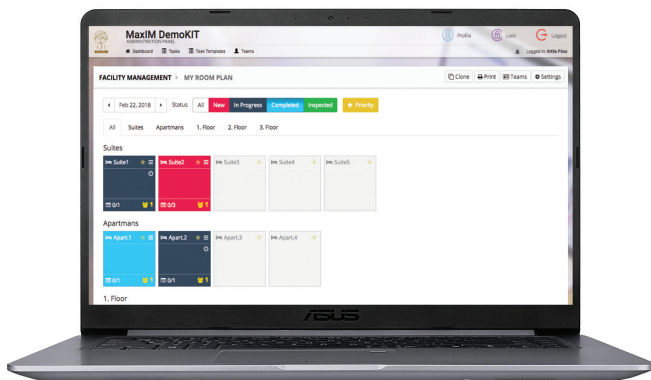
Roomlist



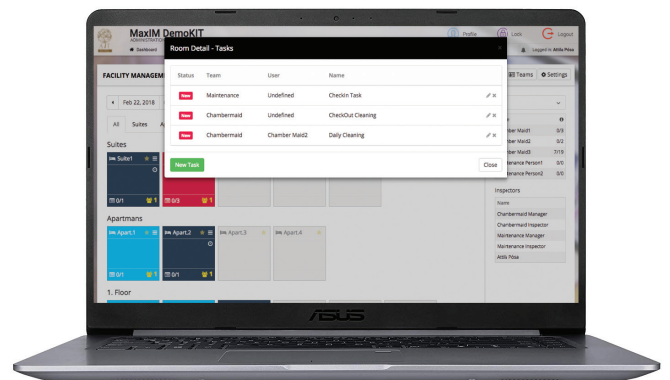
My room plan



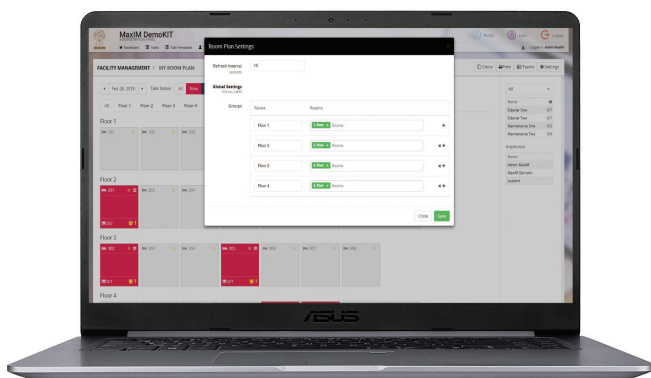
My room plan 2



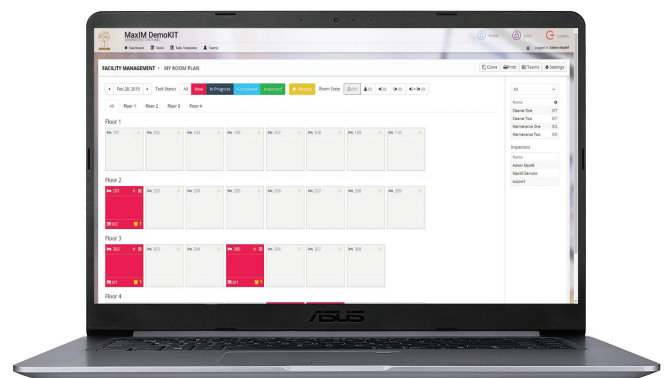
Room detail



Room plan settings



Teams of cleaners and maintenance

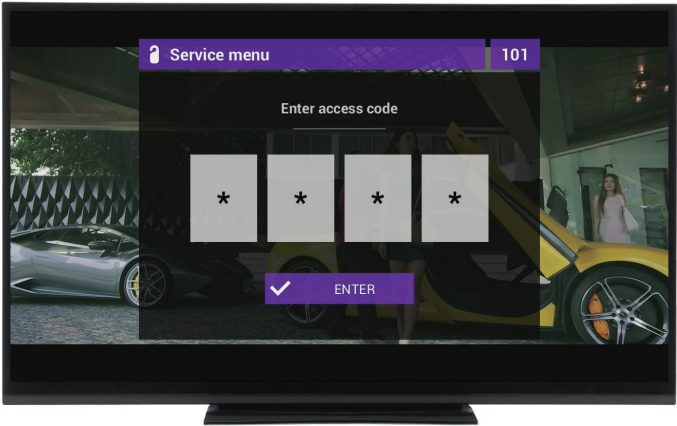


Housekeepers Service menu on guestroom TV

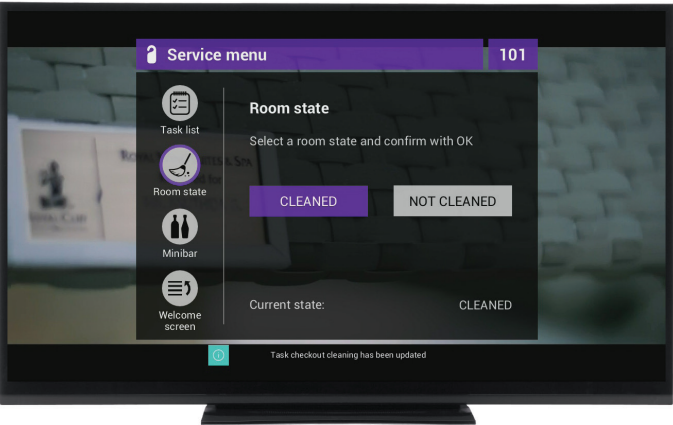
Task list



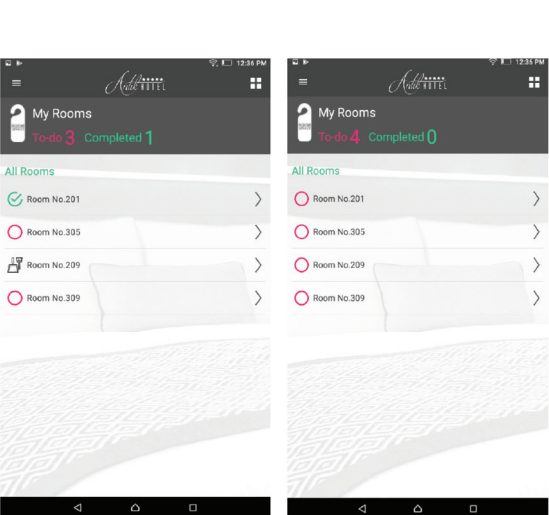
Enter an access code



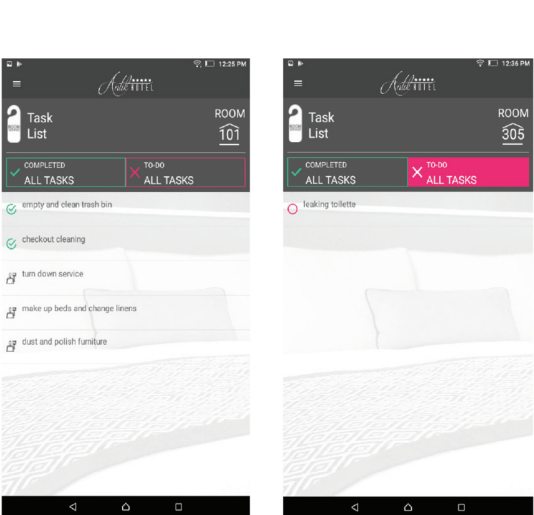
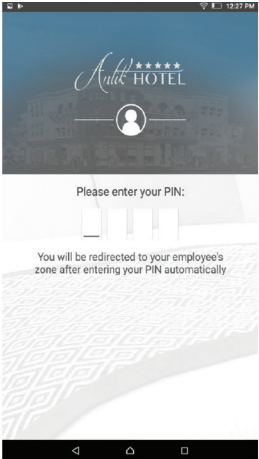
Room state - cleaned



Mini bar - add an item



Housekeepers App
for Android Smartphone



Maintenance Engineer App
for Android Smartphone

Antik - SmartHotel

With ANTIK guest room management system (GRMS) hotel is able to manage different scenario in each guest room. Lighting, temperature or curtains are controlled by guest with touch panel situated in the room or centrally by the hotel. System provides the key to efficiently and centrally manage guestroom energy consumption, gives more comfort, higher security to the room and easy maintenance system.



GRMS – Guest room management system

Central unit

- **Display type:** color OLED
- **Resolution:** 128x128/1:1 aspect ratio
- **Visible area:** 26 x 26 mm
- **Maximum number of units:** max. 32 units to one BUS line
- **Communication speed:** 100 Mbps
- **Supply voltage/tolerance:** 27 V DC, -20/ +10%
- **Dimensions:** 90 x 105 x 65 mm



Glass card holder

- **Switching voltage:** 230 V AC or 30 V DC.
- **Operating temperature:** -20 .. +55 °C.
- Glass card holder supports RFID media with a carrier frequency of 13.56 MHz. Supported card types are MIFARE Ultralight, DESFire 2K, Plus S 4K.
- The Glass card holder unit is equipped with an 8A relay output and an AgSnO2 contact.
- Glass card holder are designed for mounting into an installation box.
- **Dimensions:** 142 x 94 x 36 mm.



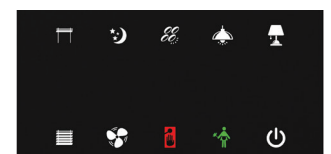
Touch Screen With Display

- **Supply voltage/tolerance:** 27 V DC, -20 / +10 %
- **Aspect ratio:** 3:4
- **Visible area:** 52,5 x 70 mm
- **Backlight:** active
- **Touchpad:** 4-wire resistive
- **Display:** 3,5"
- **Dimensions:** 94 x 94 x 36 mm



Glass Switch Panel

- **Number of control buttons:** 10
- **Temperature measuring:** YES, built-in temperature sensor
- **Resolution:** by setting 10-bit
- **Installation BUS:** BUS
- **Supply voltage/tolerance:** 27 V DC, -20 / +10 %
- **Dimensions:** 142 x 94 x 36 mm



Antik Street LED Panels

- Remote control and managing of monitor units
- Wireless communication through 4G network
- Low operating costs
- Modern futuristic design
- Sharp picture at an 8 meters distance
- Pillar installation/220V power supply
- Wireless communication via 4G network with own SIM card
- Weather resistant
- Image visible even in daylight
- Creative combinations of displayed themes



TV Scenarios

TELCO operator

Using multicast (IGMP) enabled network

- MaxIM Middleware Management System
- GX5000 - IRD, HDMI Encoders
- TR6265 - HEVC Transcoders
- Archive System - Catch-UP TV
- Video-on-Demand System
- nPRV System
- API Server for Smart Apps
- Multiroom System - live matrix monitoring
- StreamKeeper - stream monitoring
- Smart TV Apps for iOS, Android, AndroidTVs, AppleTV
- KeyRider - HLS Encryption System
- AntikCRYPT - multicast encryption
- Mini 3 IP set-top boxes
- SmartHome devices

CABLE operator

Using Coax digital DVB-C/T network with DOCSIS or parallel GPON for data services

- MaxIM Middleware Management System
- GX5000 - Transmodulator DVB-S2-DVB-C/T
- TR6265 - HEVC Transcoders
- Archive System - Catch-UP TV
- nPRV System
- Video-On-Demand System
- Multiroom System - live matrix monitoring
- StreamKeeper - stream monitoring
- API Server for Smart Apps
- Smart TV Apps for iOS, Android, Android TVs, Apple TV
- KeyRider - HLS Encryption system
- AntikCRYPT - SVB-C/T encryption
- Nano 3C/T+ IP hybrid set-top boxes
- SmartHome devices

HOSPITALITY Project

Multicast (IGMP) enabled network

- MaxIM Middleware Management System
- Digital Signage System
- Event Navigation System
- Facility Management System
- Hotel Guest App
- GX5000 - IRD, HDMI Encoders
- TR6265 - HEVC Transcoders
- Archive System - Catch-Up TV
- Video-on-Demand System
- Nano 3 IP set-top boxes

TELCO operator

Using non-multicast enabled network

- MaxIM Middleware Management System
- GX5000 - IRD, HDMI Encoders
- TR6265 - HEVC Transcoders
- Live streamers - HLS streaming of linear TV streams
- Archive System - Catch-UP TV
- nPRV System
- Video-on-Demand System
- Multiroom System - live matrix monitoring
- StreamKeeper - stream monitoring
- API Server for Smart Apps
- Smart TV Apps for iOS, Android, AndroidTVs, AppleTV
- KeyRider - HLS Encryption System
- Mini 3 IP set-top boxes
- SmartHome devices

OTT Content Provider

Broadcasting over public internet

- MaxIM Middleware Management System
- GX5000 - IRD, HDMI Encoders
- TR6265 - HEVC Transcoders
- Live streamers - HLS streaming of linear TV streams
- Archive System - Catch-UP TV
- Video-on-Demand System
- nPRV System
- Multiroom System - live matrix monitoring
- StreamKeeper - stream monitoring
- KeyRider - HLS Encryption System
- API Server for Smart Apps
- Smart TV Apps for iOS, Android, AndroidTVs, AppleTV
- Nano 3 IP set-top boxes
- SmartHome devices

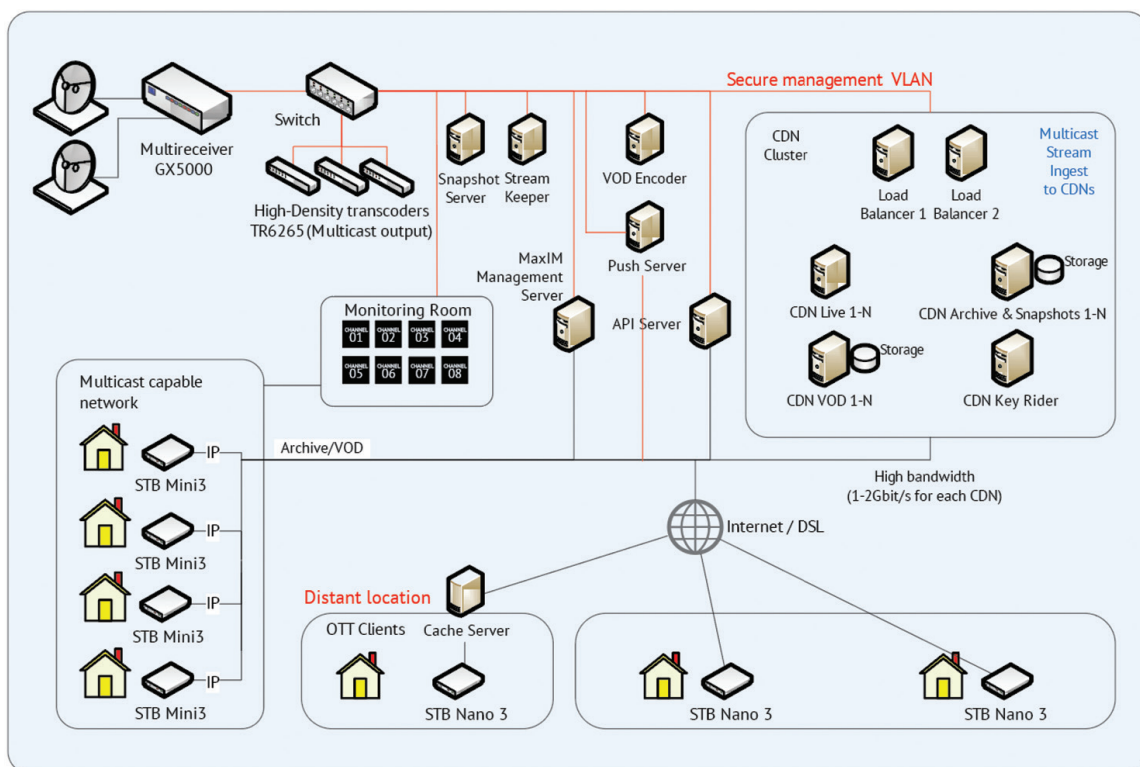
HOSPITALITY Project

Coax Network with wifi or non-multicast IP network

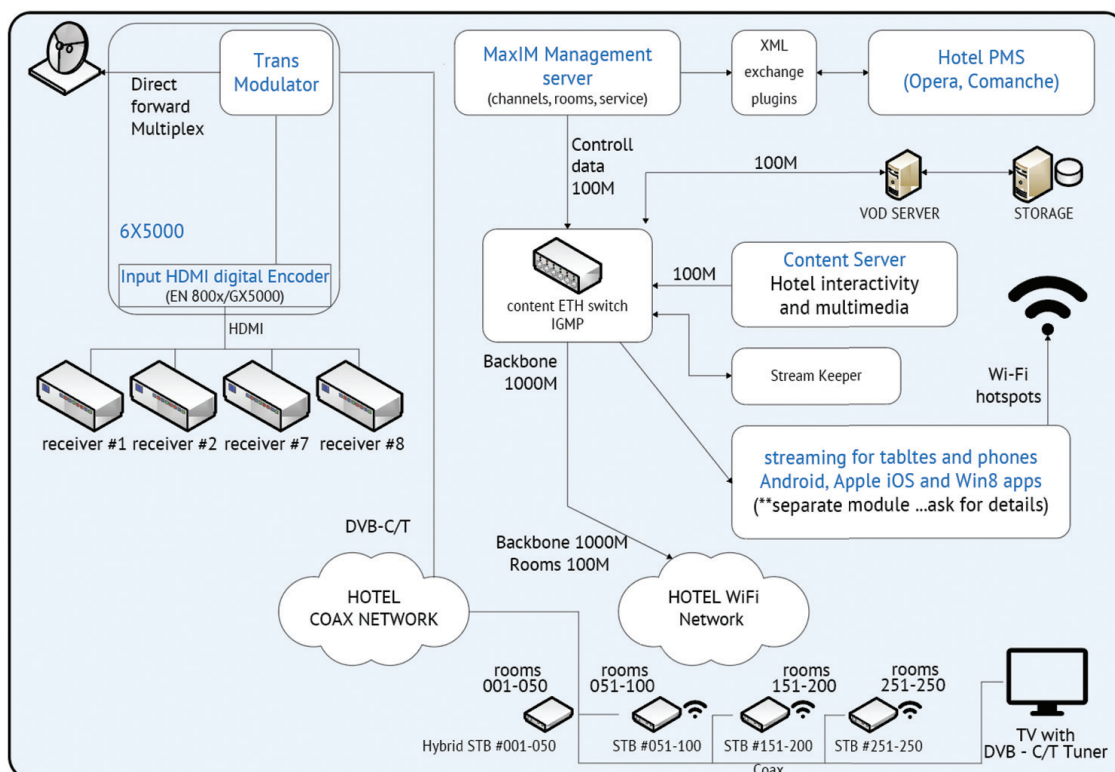
- MaxIM Middleware Management System
- Digital Signage System
- Event Navigation System
- Facility Management System
- Hotel Guest App
- GX5000 - Transmodulator - DVB-S2-DVVB-C/T, HDMI Encoders
- TR6265 - HEVC Transcoders
- Archive System - Catch-Up TV
- Video-on-Demand System
- Nano 3 C/T+IP hybrid set-top boxes

Schemes

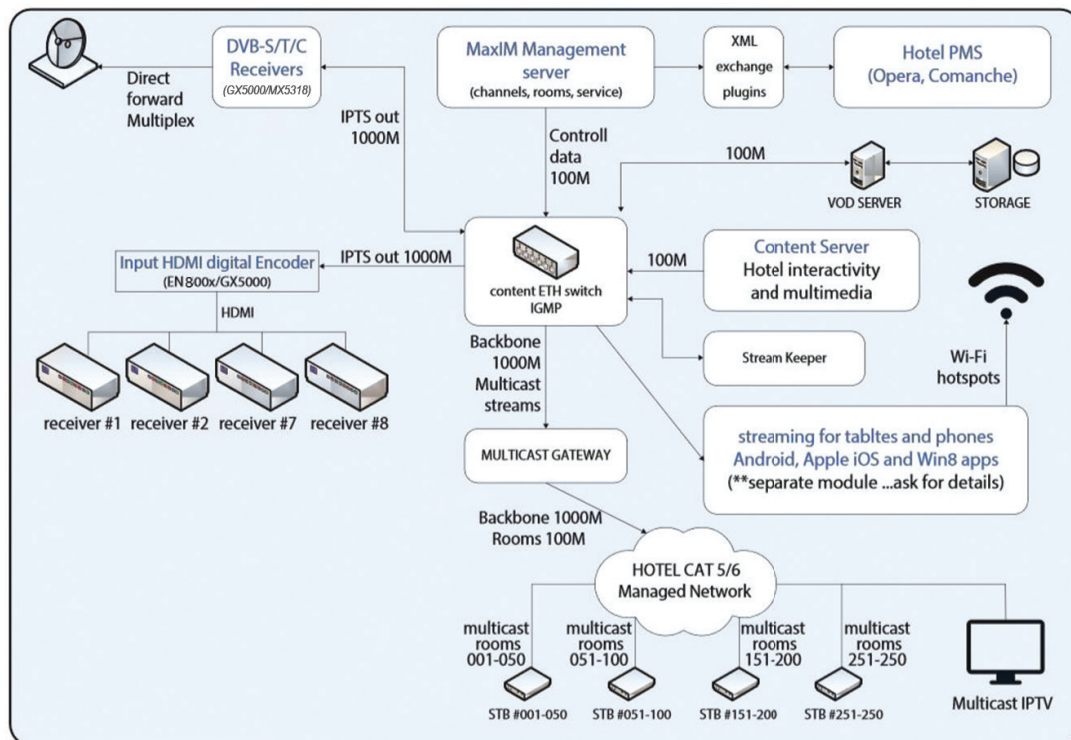
Telco/ISP/OTT/ANTIK Digital Headend



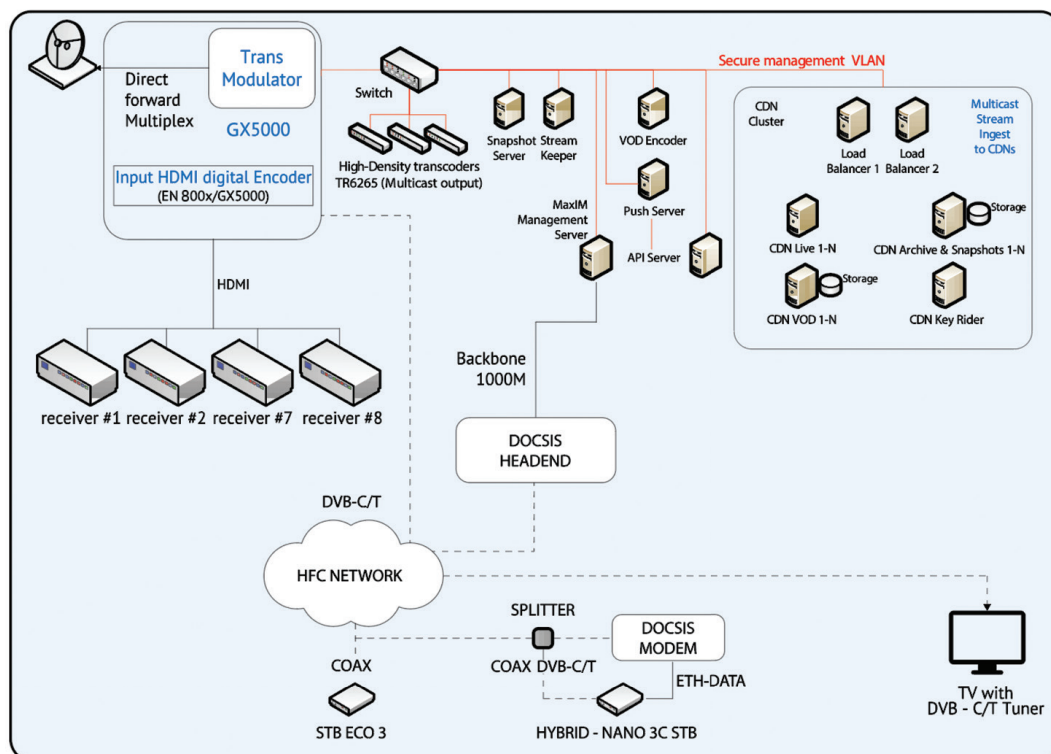
Hospitality Cable+IP Scenario



Hospitality IPTV (Hotels, Hospitals, Schools)



Cable Operator (DVB-C/T + IP)



Digital Signage Scenario - Public Internet



Digital Signage Scenario – Corporate Network



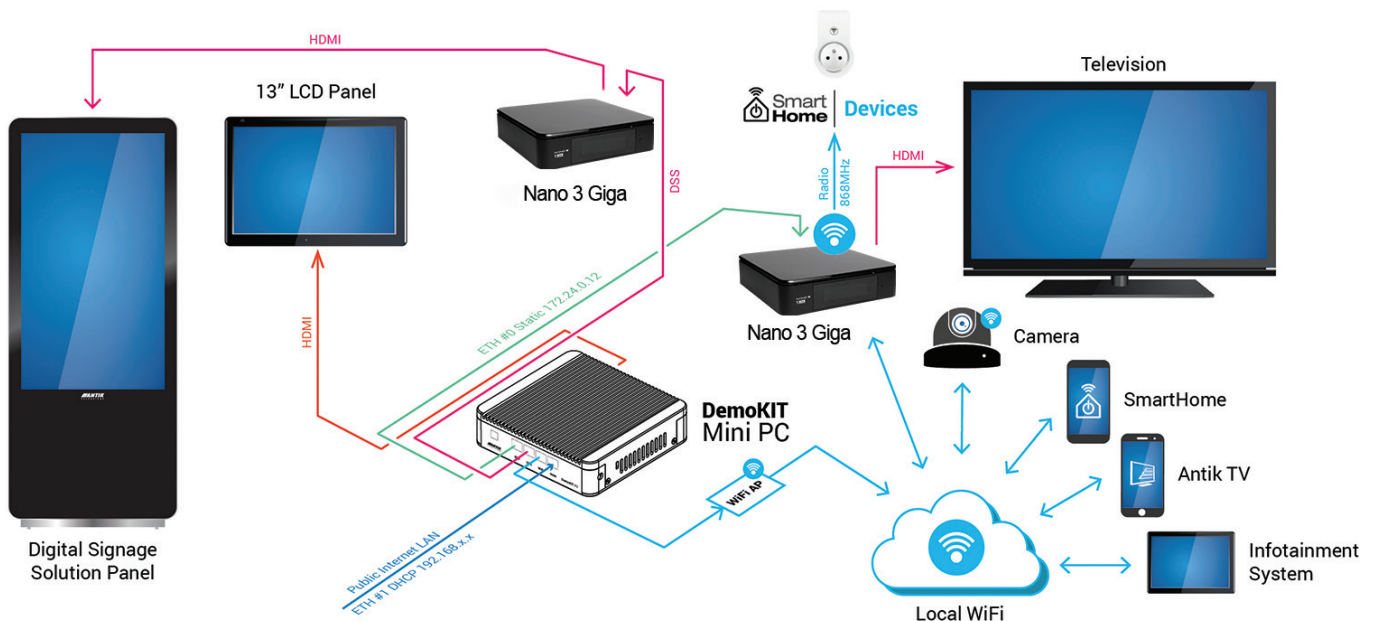
IPTV Solution all-in one

Most of Antik in one valuable pack

Antik IPTV Demokit offers you the possibility to check all the important features of Antik products. It serves as proof-of-concept of your next IPTV project and gives you chance to become familiar with major SW and HW components. Demokit you can easily run in your network or lab. Preinstalled OS Nano PC with all necessary SW servers such as IPTV Management Server, EPG, Streaming Server, Hospitality Suite, etc. are all part of delivery. 2 4K set-top boxes enabled to use on public internet as well as in multicast network are included. Pre-recorded content includes SD and HD streams, radios, TV archive and cameras. Technical support covers (incl. in price) all necessary help with IPTV demokit setup.



- UHD, HD & SD streams
- Catch up TV/TV Archive
- Timeshift
- MediaPlayer
- VOD
- Hospitality IPTV
- Event navigation
- Housekeeping Management
- TV Plugins
- EPG
- Digital Signage
- IPTV Management Maxim
- SmartHome included



Key Features



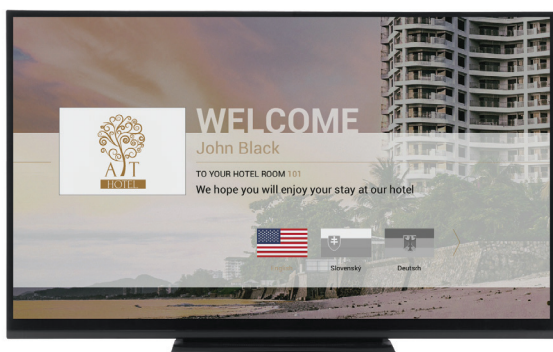
State-of-art User Interface

Easy operation for your SmartTV applications. Browsing web pages will be fast with embedded trackball. Browse the internet without turning the TV off.



MaxIM Management System

Single Web Interface for all systems setup and control from devices, channels, CMS to signage and housekeeping.



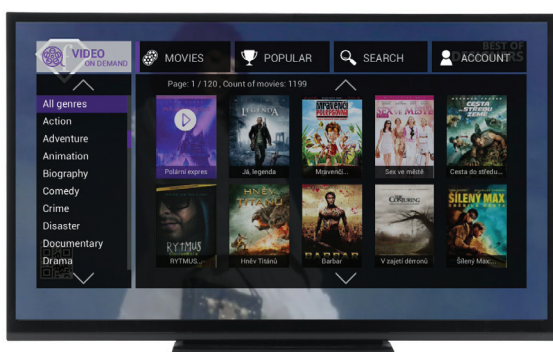
Hospitality TV

Easy-to-learn and customizable access to all Hotel services as 4K TV, Food order, Youtube and much more.



Archive by genre

Enables control of archive program feature which allows users to pause, rewind and forward. All are categorized by genres and series.



VOD

Choose a movie from the database or search some new in your favorite category. Watch trailers, movie description or rank the movie.



NEW! Hospitality Modules

Digital Signage - Event Navigation - Housekeeping. All inclusive system to remote control of digital advertising, dynamic navigation through premises and facility management.

IPTV DemoKIT 6.0 order

Customer copy-order for demo kit

Supplier

ANTIK TECHNOLOGY (CY) LTD.
Account number: 357-029048-326
IBAN: CY06 0020 0195 0000 3570 2904 8326
Beneficiary Bank Name: Bank of Cyprus
Beneficiary Bank Address: Larnaca, Cyprus
SWIFT Address: BCYPCY2N (Bank of Cyprus)
Paypal: kolla@antik.sk

Description	QTY
NANO server with end-to-end demo licensed SW	1
Antik Nano 3	2
Antik Nano 3	2
Wireless multimedia IPTV keyboard	1
5-port GB Switch	1
8 GB Capacity USB Flash Drive	1
Wireless Access Point for multicreen demo	1
USB ETH Adapter	2
ETH cables (2m)	2
Travel adapter for EU/UK/US	1
Antik STB Debug cable	1
SmartHome - Wall Power Plug	1
IP Camera SCI	
Total pcs	16 pcs
Total weight	5 kg
Total price	\$ 665

Optional	QTY
LCD Display 13.3"	1
IP Camera SCI-10	1
Total pcs	18 pcs
Total weight	6,5 kg
Total price	\$ 860

- Shipping Term DDU (Deliver Duty Unpaid)
- Delivery Lead Time: up to 3 weeks after receipt of payment
- Delivery Forwarder: DHL (free of charge)
- Terms of Payment: 100 % value of PO paid in advance by TT/*All bank charges are for the account of the customer
- Price of HW is EXW China /Country of Origin: China
- Warranty period: 23 months * Support included

Customer:

Contact Name:

Tel. Number:

Company Name:

Delivery Address:

E-mail:

Signature:

Purchase order for demo kit

Supplier

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Account number: 357-029048-326
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Customer:

Contact Name:

Tel. Number:

Company Name:

Delivery Address:

E-mail:

Signature:

[illegible]



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