



# Product Catalogue 2019

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



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Telco/ISP – IPTV/OTT –SmartHome  
IoT/SmartCity – Hospitality –Digital Signage

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## About ANTIK Technology



ANTI-K Technology develops 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.

ANTI-K's IPTV products are supported by the team of more than 200 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 HD set-top boxes with free middleware and smart devices apps both in closed multicast networks and on public internet, streaming thousands of live or archived TV channels to end-users 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. Our own network of satellite acquisition centers in all important world regions equipped with Antik SAT2IP head-end receivers and HD Hi-Density transcoders together with our distribution network serve content providers worldwide to enable them to have the right linear channels in high picture quality on right place all for minimum running costs.



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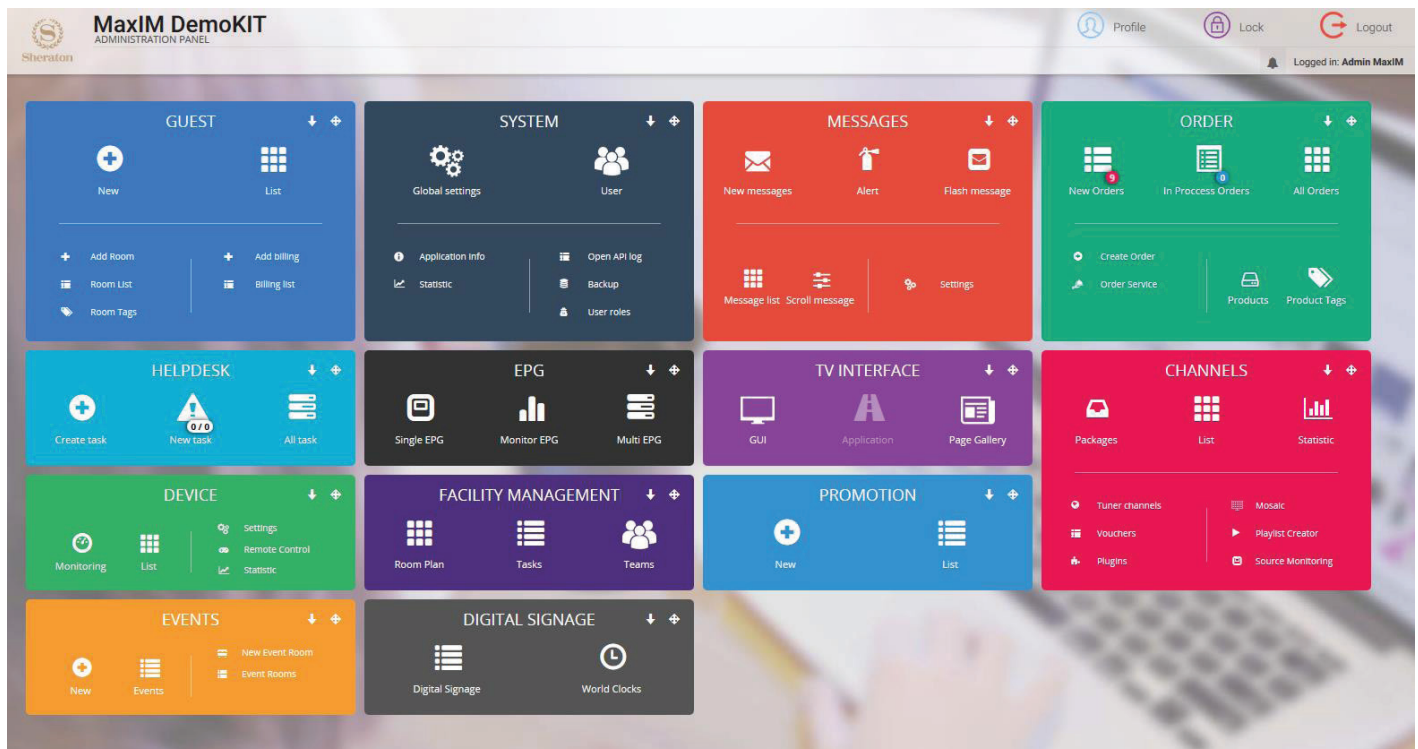
**ANTI-K**  
technology

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# MaxIM Management System

## Antik IPTV Management Server **MaxIM**

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



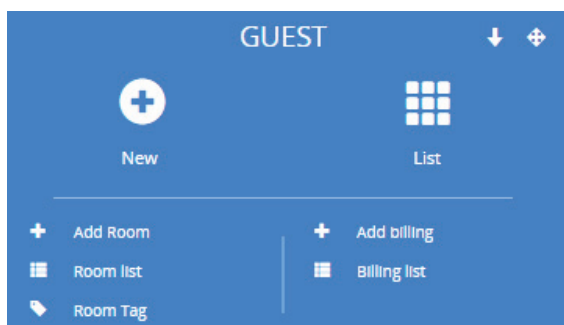
**Antik Technology** presents a professional cost-effective SW solution for a seamless management of your Antik set-top boxes and Mobile Applications network. MaxIM is the corner stone of Antik Middleware Server Family. You can easily define your channel packages, configure all or only selected customers' 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 Application
- Hospitality features, welcome message, background image, language options etc. in the same platform

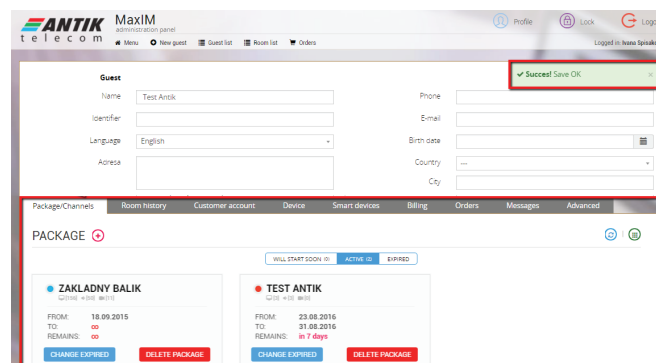
# MaxIM Management System – Antik Middleware 2.0

## USER/GUEST MODULE

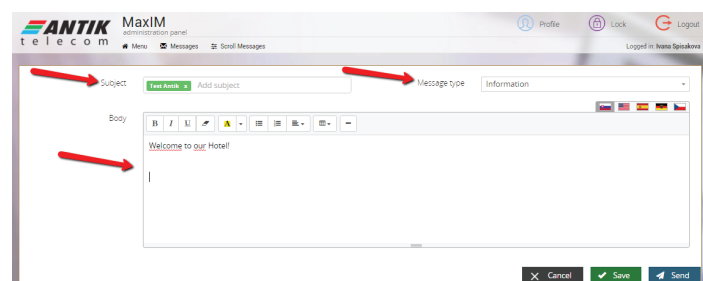


**USER/GUEST Module** brings an opportunity to manage data about guests/users and products, As well as services provided and activated to the guests/users. There is also a possibility to create groups of guests/users according to different constants (e.g. in case of hotel, there can be an apartment,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

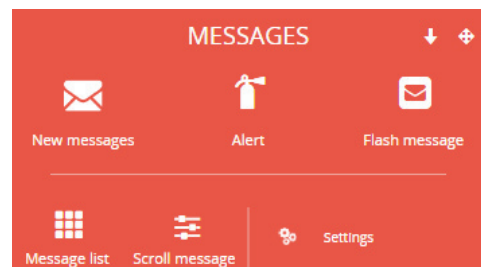
*Assigned packages and channels to guest/users.*



## MESSAGES MODULE

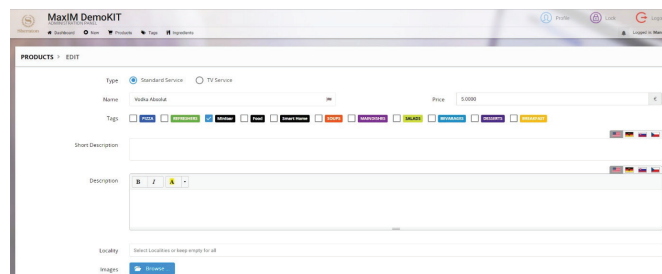
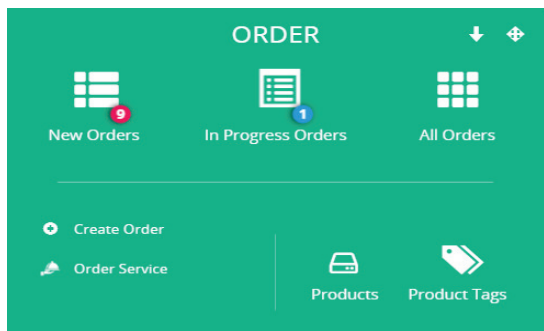


The MaxIM allows the user to send a message to a specific STBox, or to a group of STBoxes. You can send three types of messages - **normal** (send to the message box in the GUI menu), **flash** (instant messages for a selected group of set-top boxes), scroll messages.



*New message configuration.*

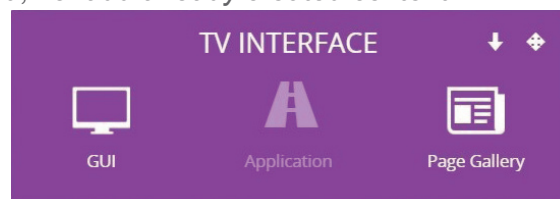
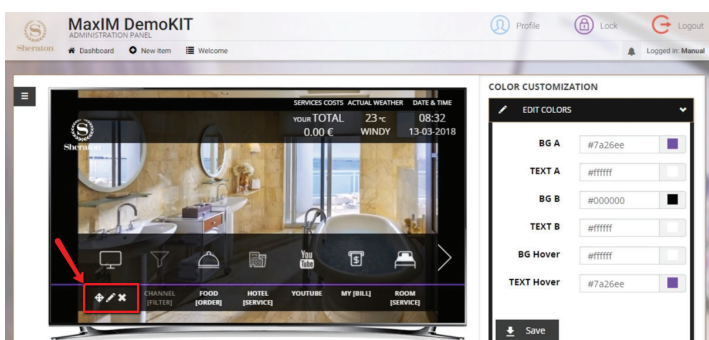
## ORDER MODULE



*Product editor screen.*

**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



**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 informations.

*GUI menu item's tools.*

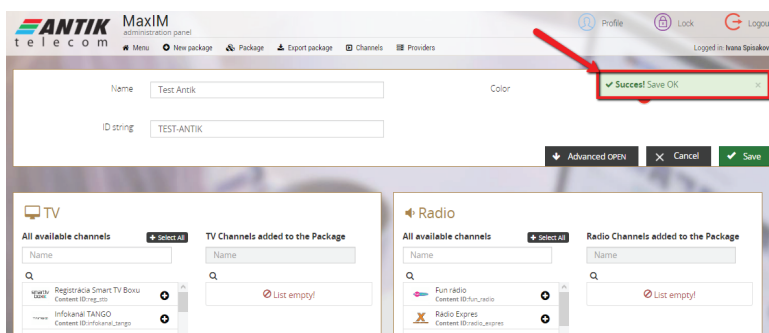
# MaxIM Management System – Antik Middleware 2.0

## EPG MODULE



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.

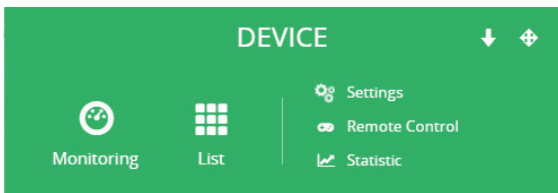
## CHANNELS MODULE



Advanced options of channel settings.

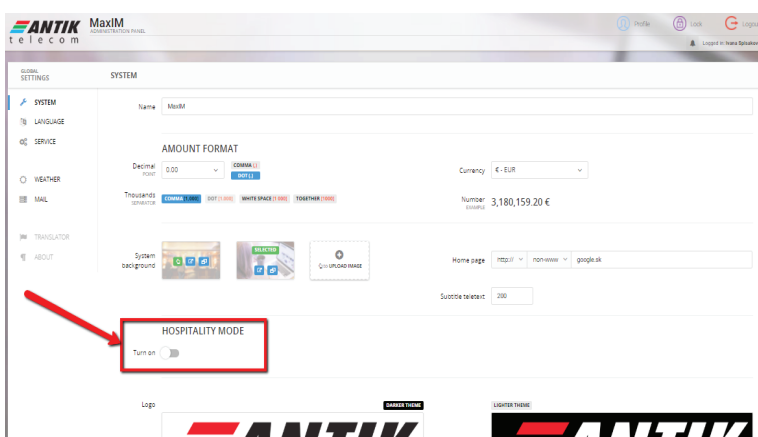
**CHANNELS Module** involves the administration of TV channels, Radio channels, Cameras and TV packages. The user has the opportunity to sort them to the packages and assign specific packages to specific user/guest.

## DEVICE MODULE

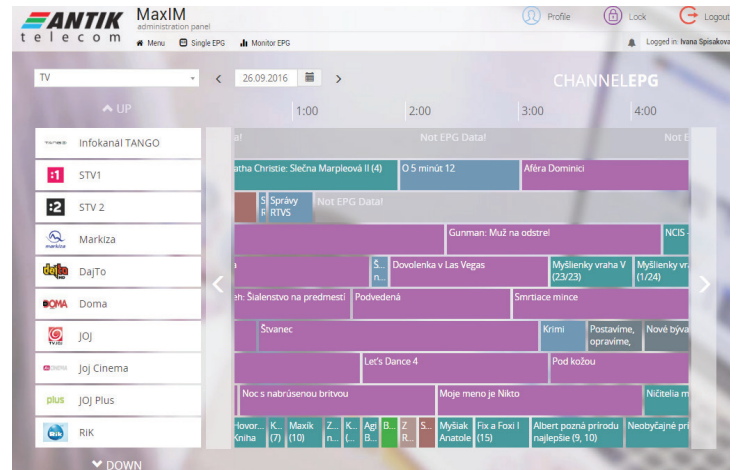


It gives an overview of the registered devices and provides the tools for administration of devices, their monitoring, remote control or the possibility to assign a new device to room or a guest and define a mode, in which a new device should operate.

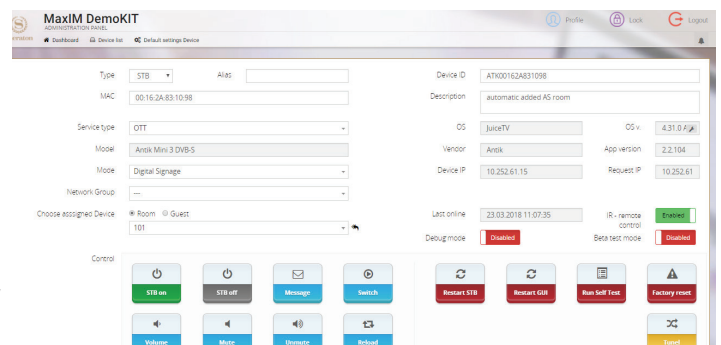
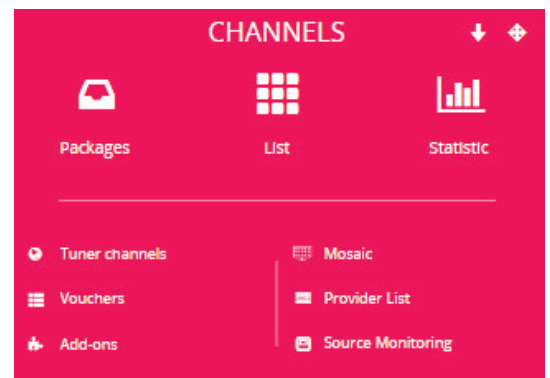
## SYSTEM MODULE



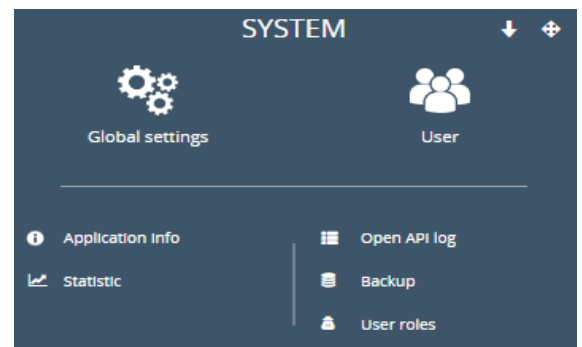
Hospitality mode switch in System Settings.



Multi EPG preview.



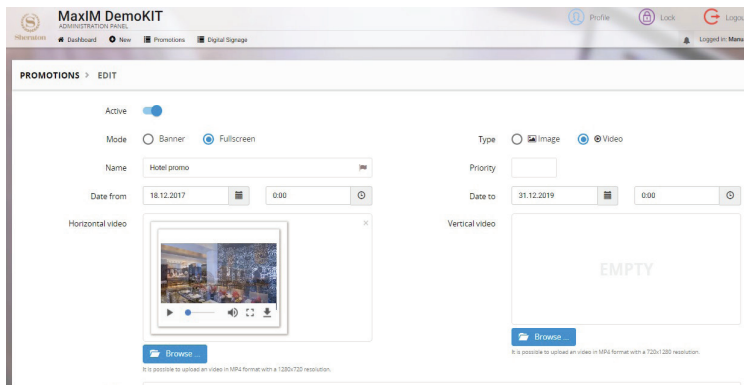
Device editor screen.



**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

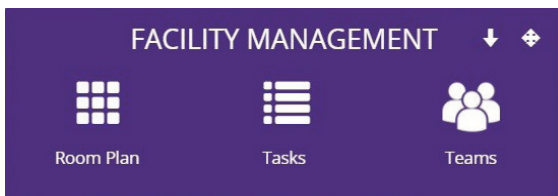


Promotion editor screen.

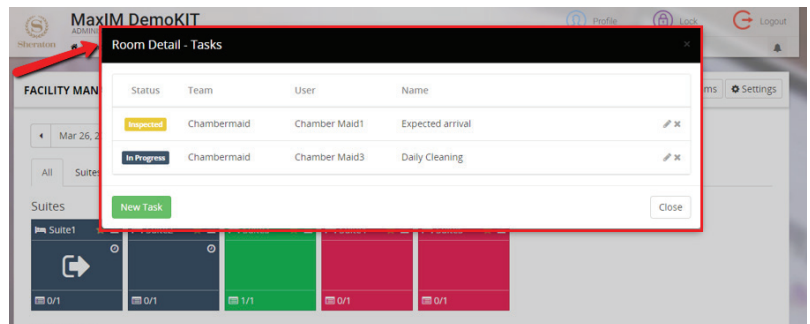


*Promotion Module is designed for creating, editing and managing promotions such as event promotions, advertisements, campaigns, special offers, and others. Once created, promotions are then showcased on the digital signage panels, located in public areas in the hotels, companies, etc.*

### FACILITY MANAGEMENT MODULE

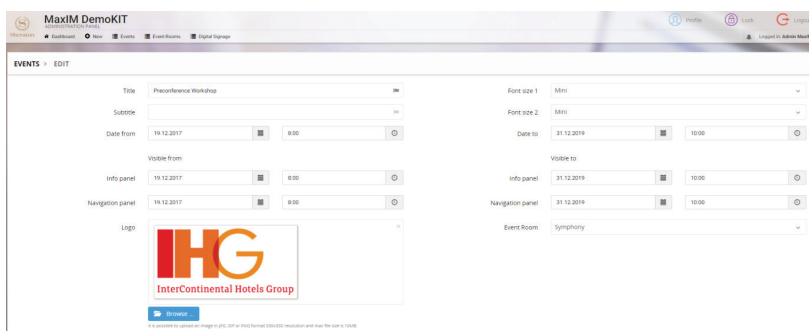


*It provides with the housekeeping solution and you can manage and track cleaning progress in hotel rooms, assign various tasks and manage teams responsible for cleaning process. There are three main features, namely room plan, tasks, and teams which allow you to control the operation of facility management.*

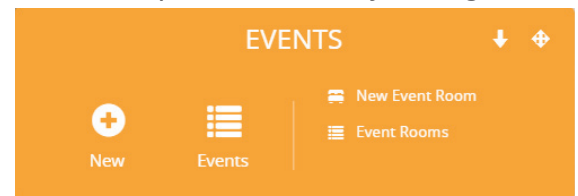


Display of assigned tasks to the room.

### EVENTS MODULE



Event editor screen.

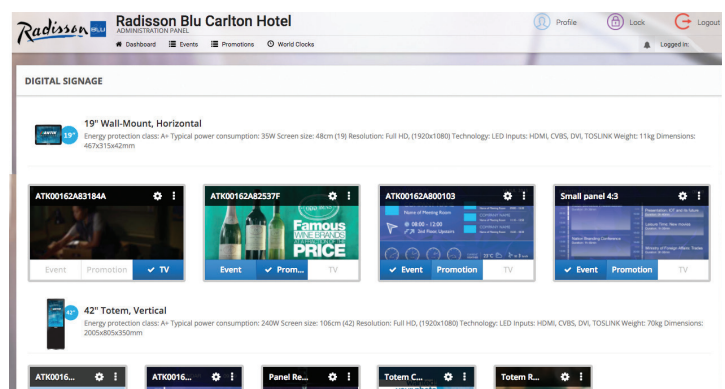


*It offers event management solution that helps you to streamline event planning and with this module, you can keep your event management up-to-date, create new events and event rooms, as well as access and edit planned events and event rooms.*

### DIGITAL SIGNAGE MODULE



*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.*



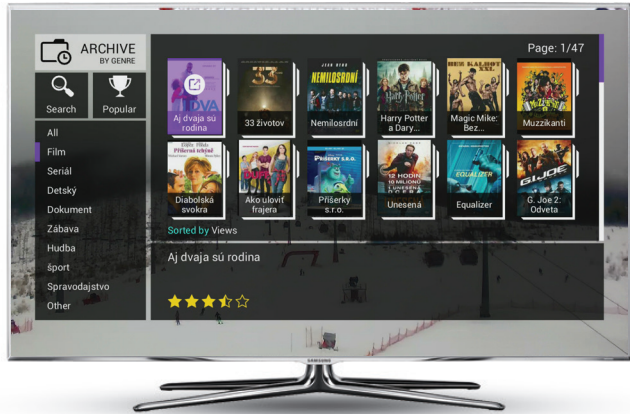
Digital Signage screen.

# Antik Middleware 2.0



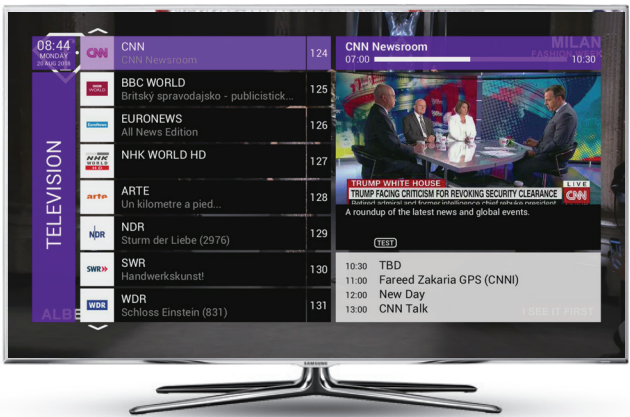
## Basic menu

*Very fast, clear and easy to navigate.*



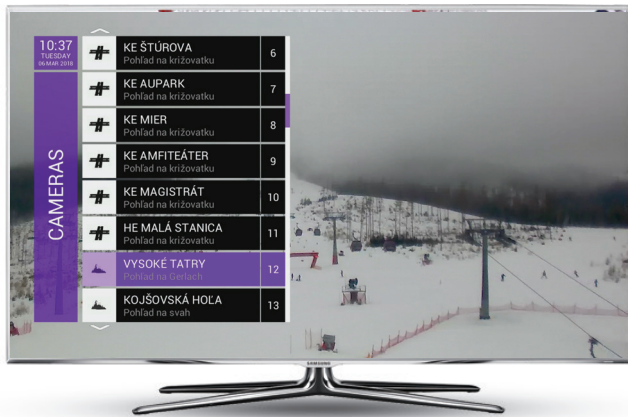
## Archive by genres (Catch-Up TV)

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



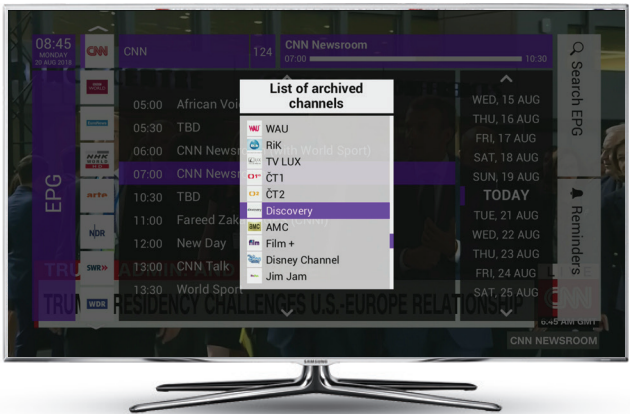
**EPG**

Offers simple look at channel line-up. Single EPG offers simple look at channel program list and basic data. Provides program guide data for all TV channels shows channels list and programs timeline and program info.



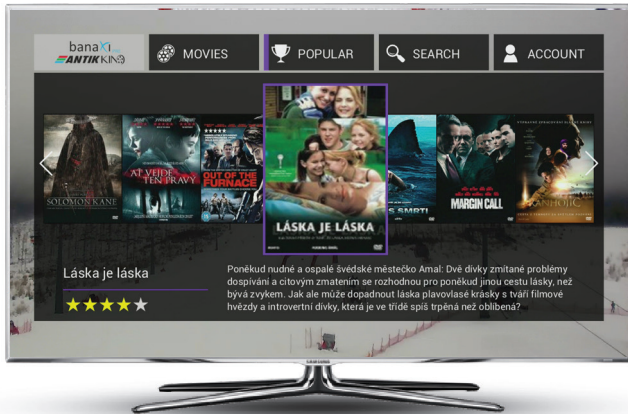
## Cameras

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



## Archive by channel

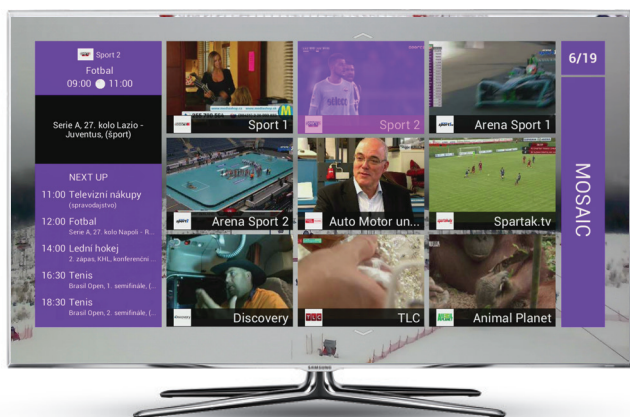
*Archive is sorted by channels according to the time it was broadcasting.*



**VoD**

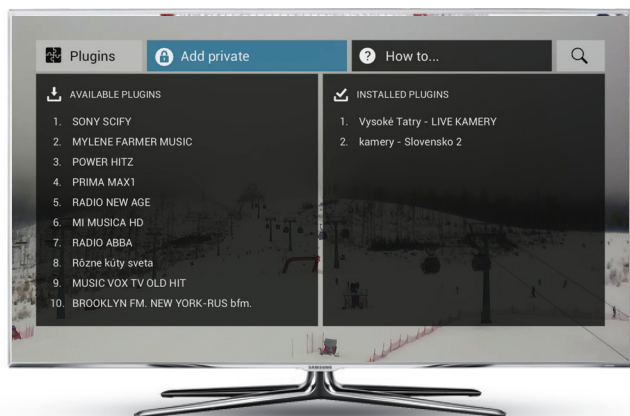
Complete VOD GUI supported by Antik VOD Server Solution.  
Choose a movie from the database or search some new in your  
favorite category. Watch trailers, movie description or rank the  
movie.

# Antik Middleware 2.0



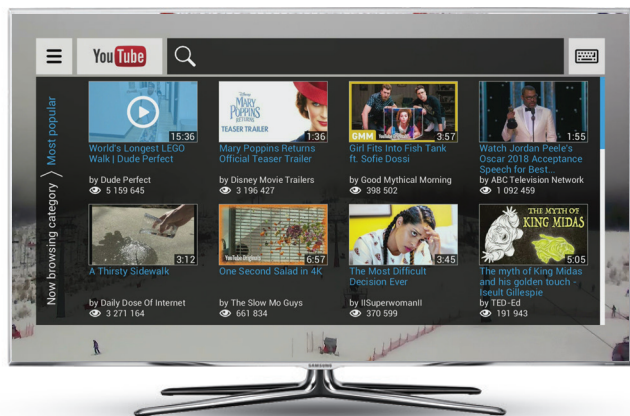
## Mosaic

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.



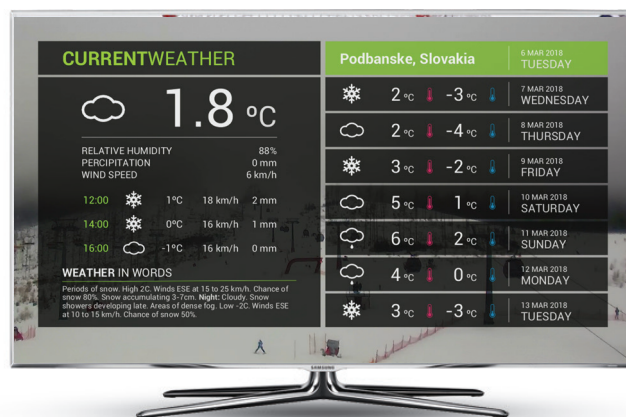
## Plug-inns

Now you can add your own TV channel, where you can watch internet channels, live stream, internet radios and the view of home cameras or other public or private content.



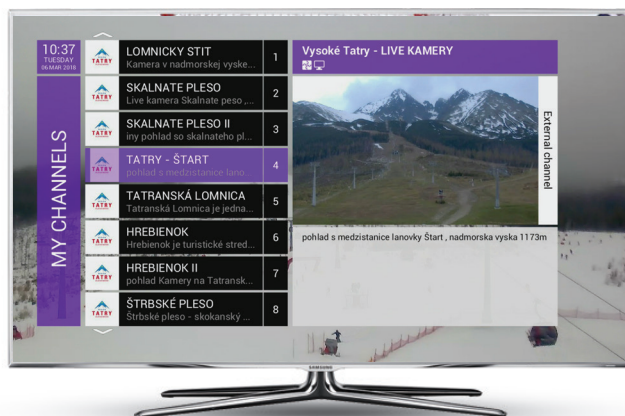
## YouTube

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



## Weather

Access to predefined cities weather forecast up to 7 days.



## 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.

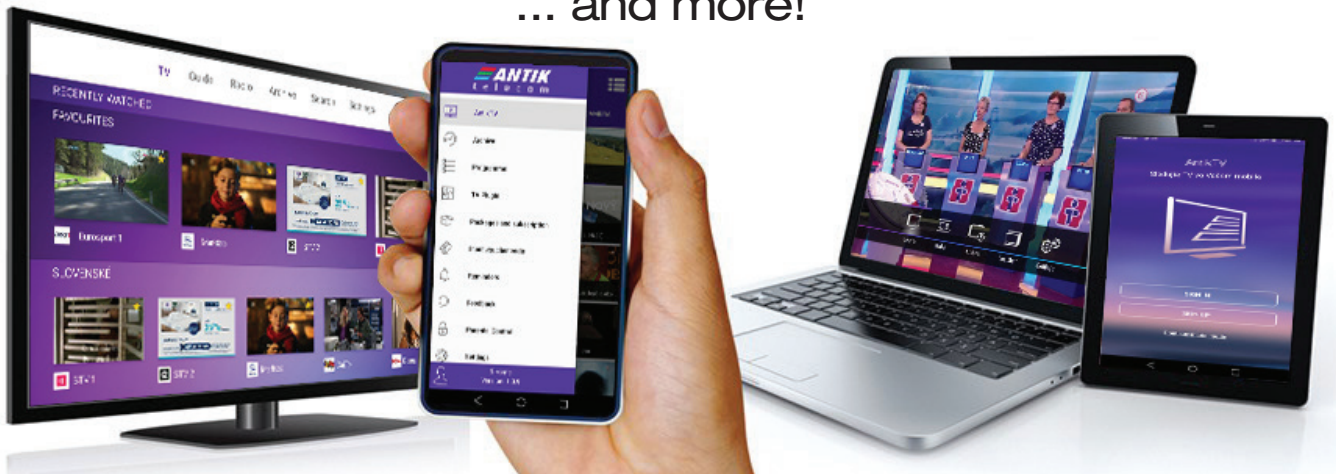


## Media Player

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

# End-2-End OTT TV Delivery Platform

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



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
- Customer Zone
- 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

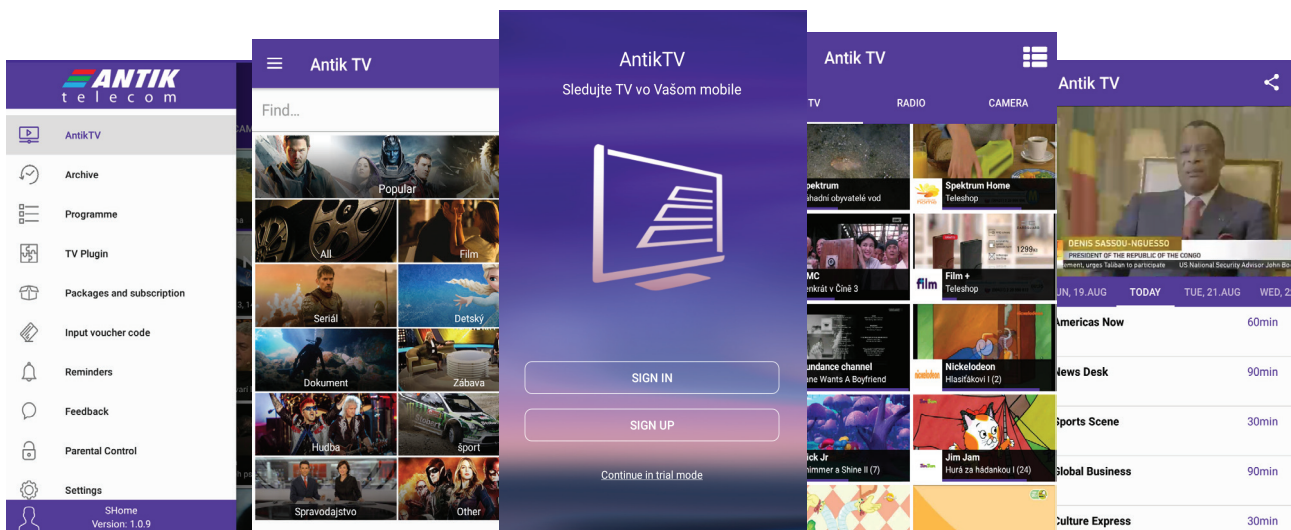
##### Android TV:

Android 5 and higher

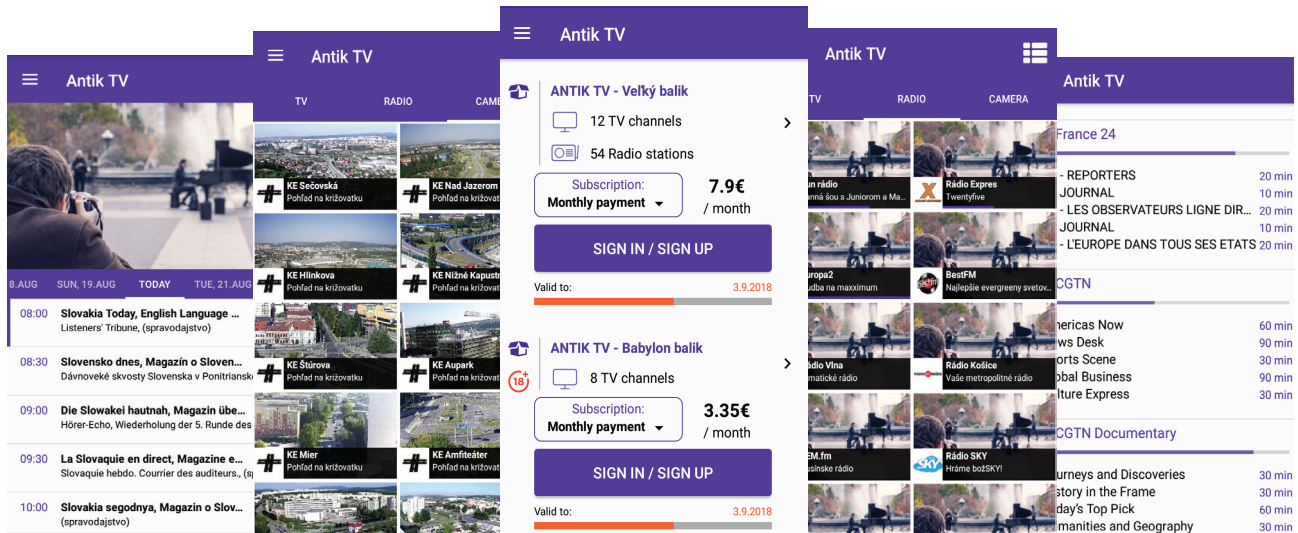
##### Apple TV Box:

iOS 10 and higher  
ATV4

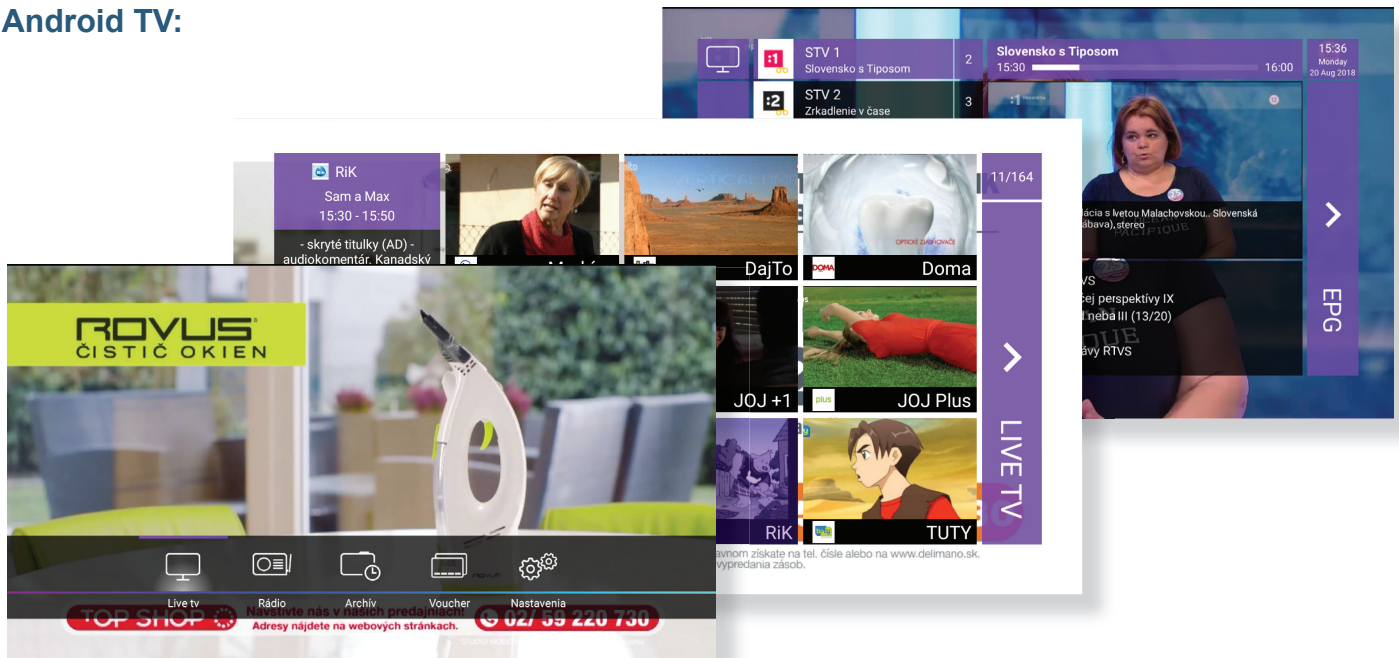
### Android and iOS Smartphones/Tablets:



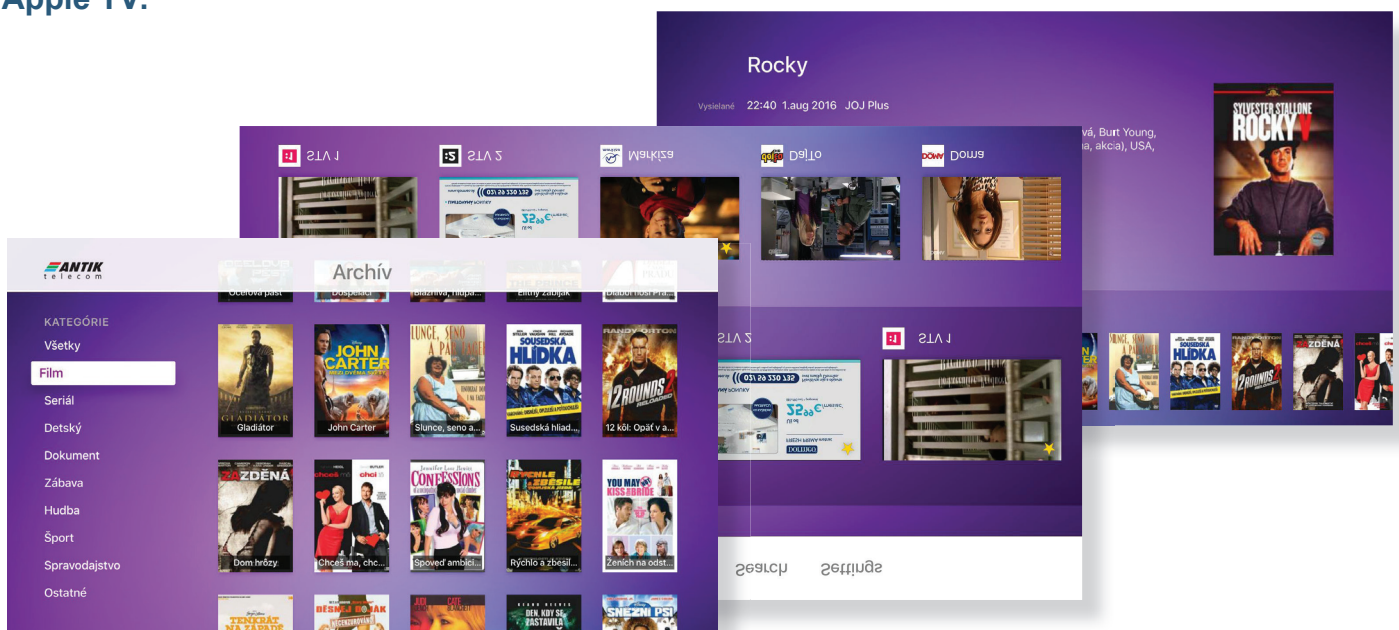
# End-2-End OTT TV Delivery Platform



## Android TV:



## Apple TV:



# Antik Media Streamer

## Antik Media Streamer

### End-to-End TV Everywhere delivery system.

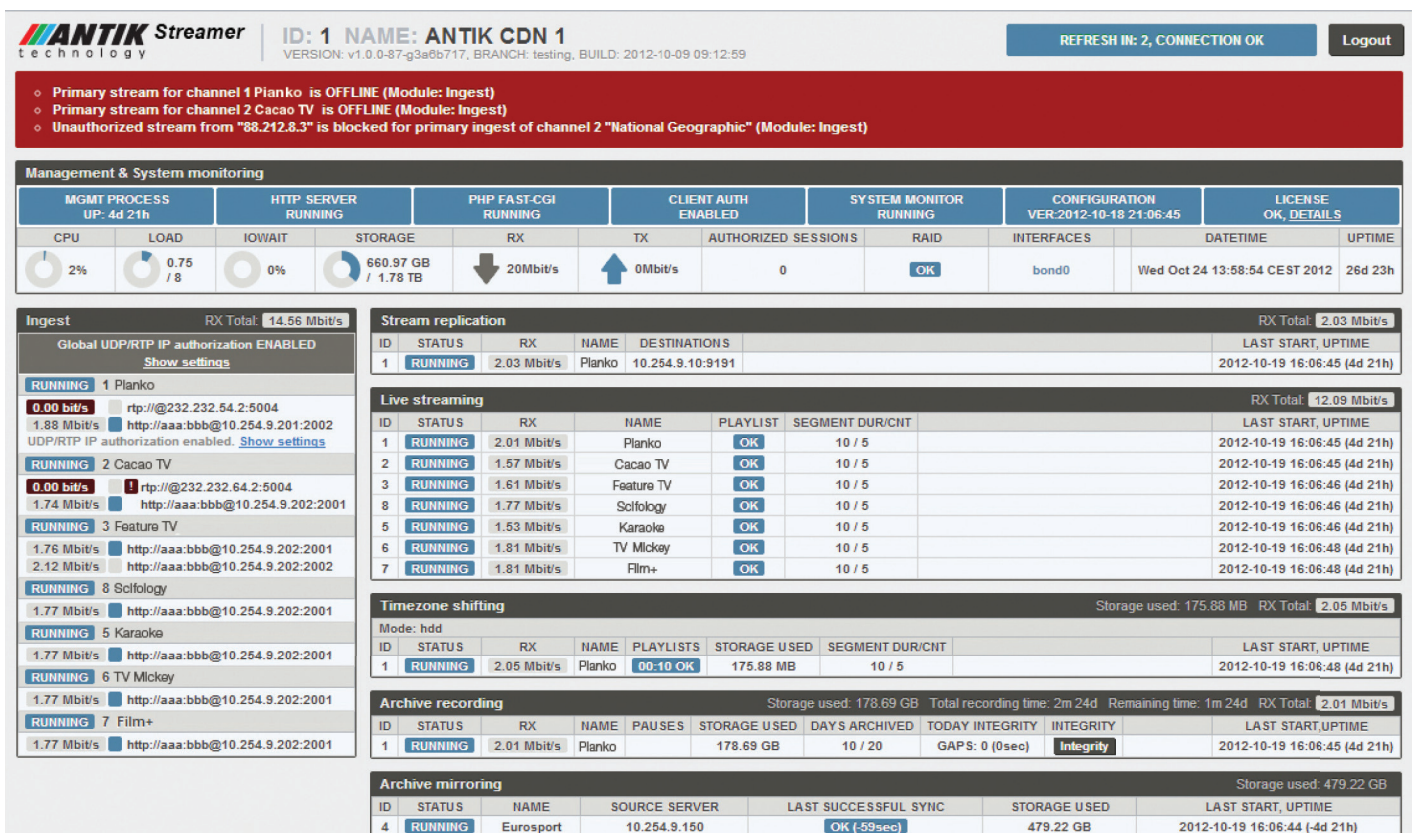
Antik Media Streamer provides you with end-to-end way to create, deliver secure and manage your local or global content delivery network. It uses robust HTTP Live Streaming (HLS) protocol to reach your customers even in areas with limited quality of public internet.

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.



- Live
- Archive
- Video-On-Demand
- Encryption system
- Cache



### 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

## 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
- Monitoring interface visualises:
  - total data inflow into modul
  - input stream bitrates (coming from ingest module)
  - count and length of segment in playlist
  - playlist status
  - segmenter process uptime/destination IPs input stream bitrates (coming from ingest module) replicator uptime

Live streaming							RX Total: 11.85 Mbit/s
ID	STATUS	RX	NAME	PLAYLIST	SEGMENT DUR/CNT	LAST START, UPTIME	
1	RUNNING	1.89 Mbit/s	Pianko	OK	10 / 5	2012-10-16 12:45:58 (43min)	
2	RUNNING	1.73 Mbit/s	Scifology	OK	10 / 5	2012-10-16 12:45:59 (43min)	
3	RUNNING	1.65 Mbit/s	TV MUSIC	OK	10 / 5	2012-10-16 12:46:01 (43min)	

## Catch-Up TV Modul (TV Archive)

Archive recording										Storage used: 18.90 GB	Total recording time: 2m 26d	Remaining time: 2m 2d	RX Total: 1.97 Mbit/s
ID	STATUS	RX	NAME	PAUSES	STORAGE USED	DAYS ARCHIVED	TODAY INTEGRITY	INTEGRITY		LAST START, UPTIME			
1	RUNNING	1.97 Mbit/s	Planko		18.90 GB	2 / 20	GAPS: 20 (35min 13sec)	Integrity		2012-10-16 12:45:55 (43min)			

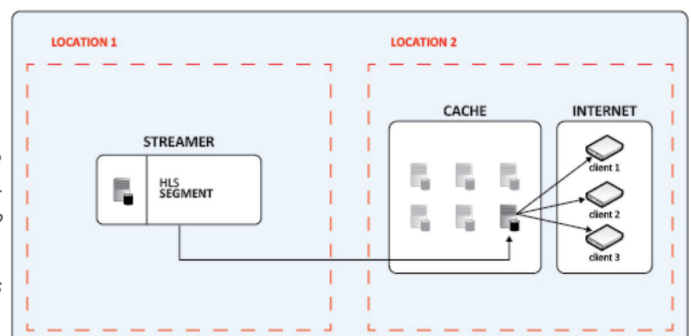
- Records all content of the specific stream and allows access to it using EPG information
- Includes segmenter which creates 10s files- directly enables to use HLS protocol for content delivery
- High availability – even curenly played program can be accessed (less than 2 minutes from original playback time)
- Uses HLS protocol for streaming, so all the features described in Live Streaming can be utilized
- Allows to define time braks 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 diskpace 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	<div>1: 00:00:27 - 00:00:50 : 23sec</div> <div>2: 00:02:42 - 00:03:06 : 24sec</div> <div>3: 00:04:57 - 00:05:39 : 42sec</div> <div>4: 00:19:37 - 00:20:00 : 23sec</div> <div>5: 00:21:10 - 00:21:32 : 22sec</div> <div>6: 00:22:02 - 00:22:25 : 23sec</div> <div>7: 00:23:36 - 00:23:56 : 20sec</div> <div>8: 00:31:41 - 00:32:22 : 41sec</div> <div>9: 09:18:31 - 09:19:10 : 39sec</div> <div>10: 09:25:04 - 09:25:54 : 50sec</div> <div>11: 09:27:25 - 09:27:43 : 18sec</div> <div>12: 09:56:30 - 09:57:16 : 46sec</div> <div>13: 10:13:25 - 10:14:54 : 1min 29sec</div> <div>14: 10:53:08 - 10:55:55 : 2min 47sec</div>				2012-10-16 13:30:26			

## 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



# Scrambling

## AntikCrypt CAS

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

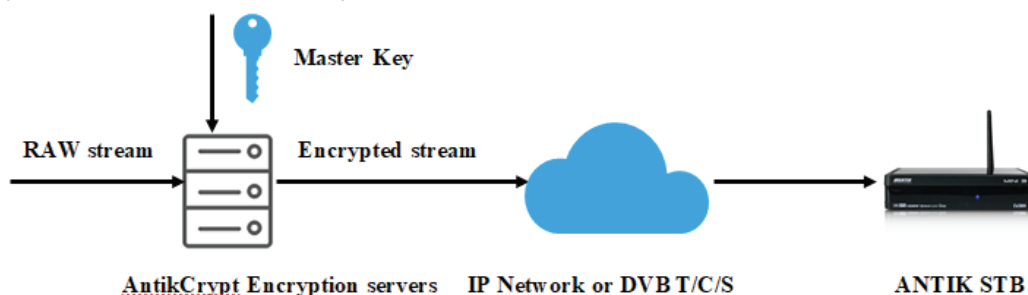
ANTIKCrypt stream encryption system provides an efficient and secure way of protecting streams, including IP, DVBT/C/S. It can be quickly and easily deployed in existing headend infrastructure. Single Encryption can be utilised in both coax and IP networks.

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.

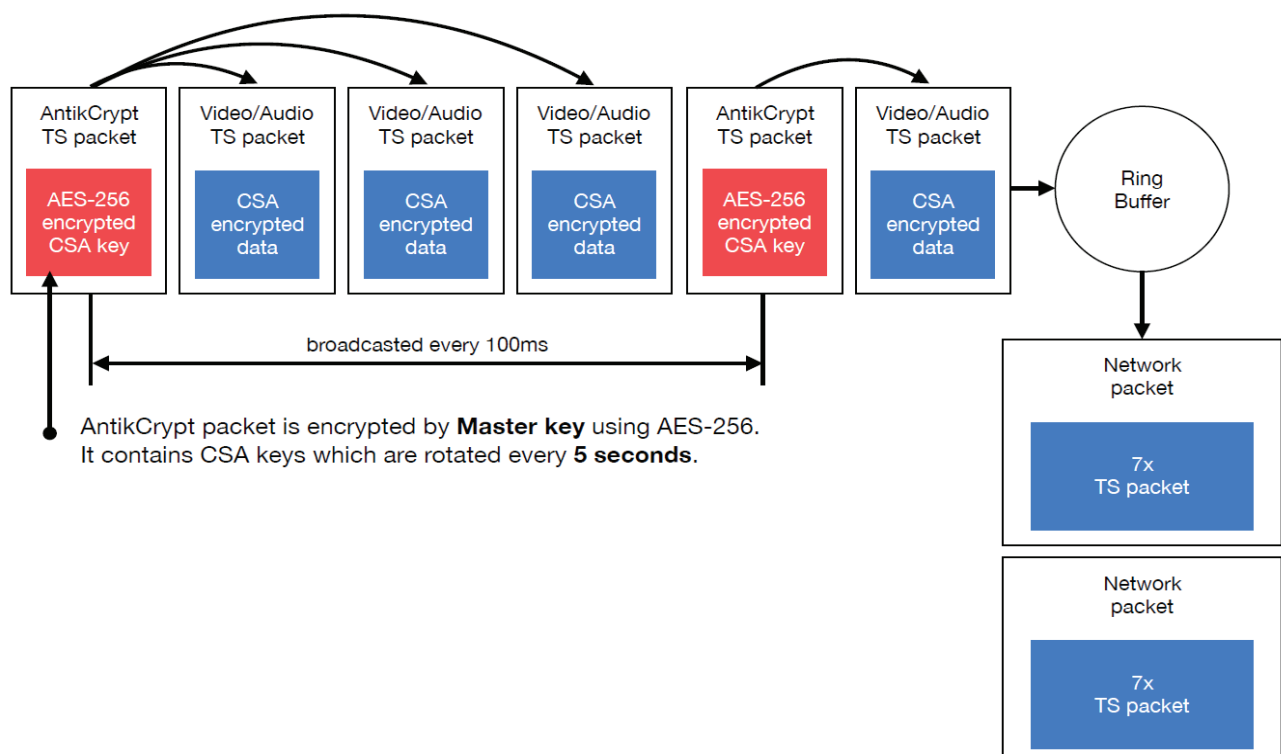
### Key Features

- 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

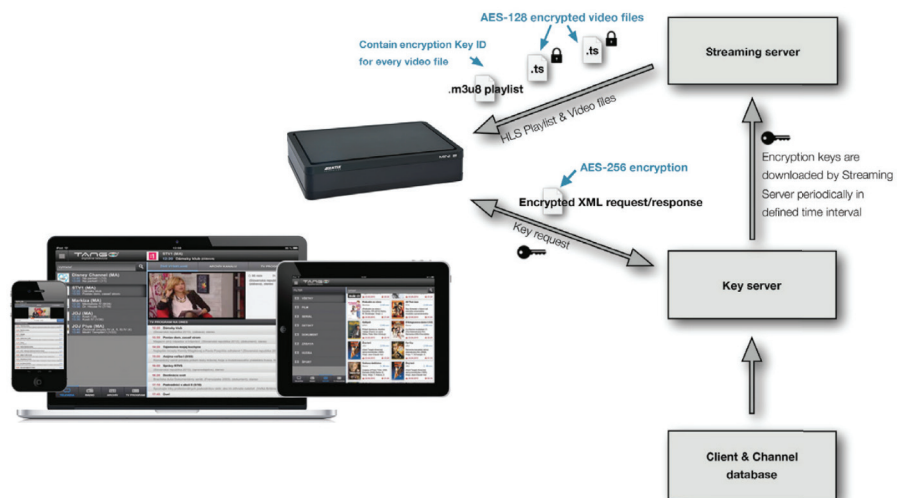
### Protection management for your content monetization

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, iOS and multicast delivery
- 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
<div>Detail</div>	STV1	1min	<div>Version 1363506100</div> <div>Generated 2013-03-17 08:41:40 (-34sec)</div> <div>Value 386363a8f0d5f06d4f572599e3363ee</div>	<div>Version 1363506100</div> <div>Generated 2013-03-17 08:41:40 (-34sec)</div> <div>Value 386363a8f0d5f06d4f572599e3363ee</div>	<div>Version 1361444344</div> <div>Generated 2013-02-21 11:59:04 (-23d 20h)</div> <div>Value 85d5e87996142c83c0b9bee4a4efb140</div>	30866
<div>Detail</div>	MARKIZA	1min	<div>Version 1363506100</div> <div>Generated 2013-03-17 08:41:40 (-34sec)</div> <div>Value 4d6503b31877862d6431e40b4b41908</div>	<div>Version 1363506100</div> <div>Generated 2013-03-17 08:41:40 (-34sec)</div> <div>Value 4d6503b31877862d6431e40b4b41908</div>	<div>Version 1361444344</div> <div>Generated 2013-02-21 11:59:04 (-23d 20h)</div> <div>Value 98a87c756607b8e6f18dbbc8da05a89</div>	30864
<div>Detail</div>	STV2	1min	<div>Version 1363506100</div> <div>Generated 2013-03-17 08:41:40 (-34sec)</div> <div>Value 1ce82e4c904aab9754be9f05b7c841ff</div>	<div>Version 1363506100</div> <div>Generated 2013-03-17 08:41:40 (-34sec)</div> <div>Value 1ce82e4c904aab9754be9f05b7c841ff</div>	<div>Version 1361444344</div> <div>Generated 2013-02-21 11:59:04 (-23d 20h)</div> <div>Value 169278c5b8ec0dc0d94bdcdb7e1a66bf</div>	30861
<div>Detail</div>	DOMA	1min	<div>Version 1363506100</div> <div>Generated 2013-03-17 08:41:40 (-34sec)</div> <div>Value 5b25e6e2b79d12c5b0d7ee0f77f57591</div>	<div>Version 1363506100</div> <div>Generated 2013-03-17 08:41:40 (-34sec)</div> <div>Value 5b25e6e2b79d12c5b0d7ee0f77f57591</div>	<div>Version 1361444344</div> <div>Generated 2013-02-21 11:59:04 (-23d 20h)</div> <div>Value fc390413c579e2e6a2ba25ecf8e94255</div>	30858
<div>Detail</div>	JOJ	1min	<div>Version 1363506100</div> <div>Generated 2013-03-17 08:41:40 (-34sec)</div> <div>Value c0afdc39c9f97f646b336f19e890f00</div>	<div>Version 1363506100</div> <div>Generated 2013-03-17 08:41:40 (-34sec)</div> <div>Value c0afdc39c9f97f646b336f19e890f00</div>	<div>Version 1361444344</div> <div>Generated 2013-02-21 11:59:04 (-23d 20h)</div> <div>Value 91f0de4b3bcb92a7606f8b7d4ac0d2</div>	30856
<div>Detail</div>	JOJPLUS	1min	<div>Version 1363506100</div> <div>Generated 2013-03-17 08:41:40 (-34sec)</div> <div>Value a6747bfc1696cbbf2ed7e3d4d0e13e9</div>	<div>Version 1363506100</div> <div>Generated 2013-03-17 08:41:40 (-34sec)</div> <div>Value a6747bfc1696cbbf2ed7e3d4d0e13e9</div>	<div>Version 1361444344</div> <div>Generated 2013-02-21 11:59:04 (-23d 20h)</div> <div>Value 7a8d99d815a2c638e5972761b74b424</div>	30855

Inactive keys

	ID	RENEW	LATEST VERSION	OLDEST VERSION	VERSIONS
<div>Detail</div>	TEST	1min	<div>Version 1361374775</div> <div>Generated 2013-02-20 16:39:35 (-24d 16h)</div> <div>Value 7232547d34f7d45a47ec016d11e34a</div>	<div>Version 1361284328</div> <div>Generated 2013-02-19 15:32:08 (-25d 17h)</div> <div>Value 92d941a7b5bd5e933236c6f4cd196df</div>	1468
<div>Detail</div>	KEY	1min	<div>Version 1361374775</div> <div>Generated 2013-02-20 16:39:35 (-24d 16h)</div> <div>Value 7b44e5bf7152cd96402b32f5c8d08ec</div>	<div>Version 1361374149</div> <div>Generated 2013-01-28 12:55:49 (-1m 17d)</div> <div>Value 3544697b803cd570c11e646509d8ce</div>	8871

# Scrambling/Monitoring

## Antik Monitoring Room

### Cost-effective and high-performance tool for NOC IPTV monitoring

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

**FREE TRIAL**  
on  
[www.antiktech.com](http://www.antiktech.com)



- 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
- SNMP support

## Key Features

### Video

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

### Audio

- MPEG1/2
- AAC
- AC3
- Dolby 5.1

### IP Source

- UDP
- RTP
- RTSP
- RTMP
- HLS

### Detections

- freeze frame
- black
- color bar
- audio loss
- video loss
- loudness

### Resolution

- SD
- HD

### Capacity

- 8/32/48
- 64/80/ULT

### OS

- Windows 7 64bit
- Windows 7 Professional / Ultimate

### Alarm

- OSD (on-screen visual alarm)
- Alert tone
- Database records

### Log

- Alarm log storage
- Query by time/ program name/ error type

## Other Features

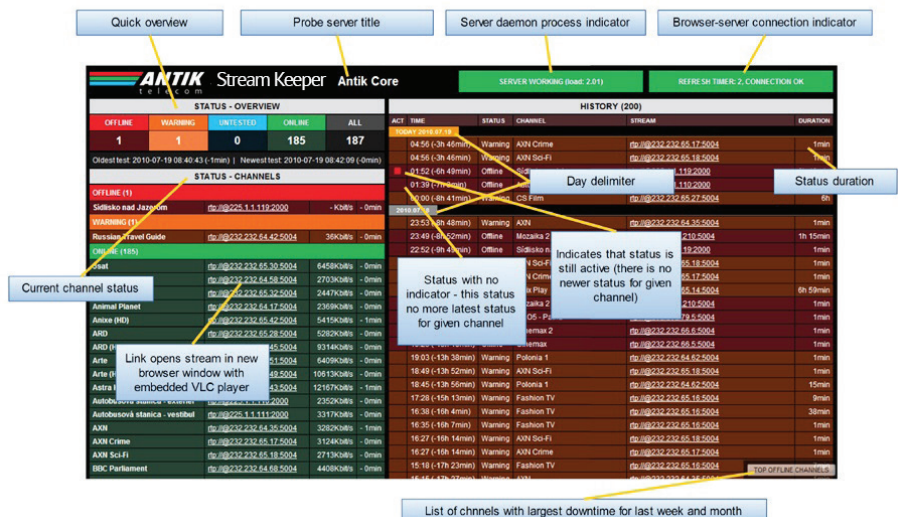
- Web based control
- Layout tool provide templates for quick launch, also customization template with which customer could draw rectangles flexibly
- Support both Analog and digital Clock
- Support GIF picture and customized TEXT
- Support main TV wall and secondary TV wall
- Support round-robin
- Multiple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

## Antik Stream Keeper

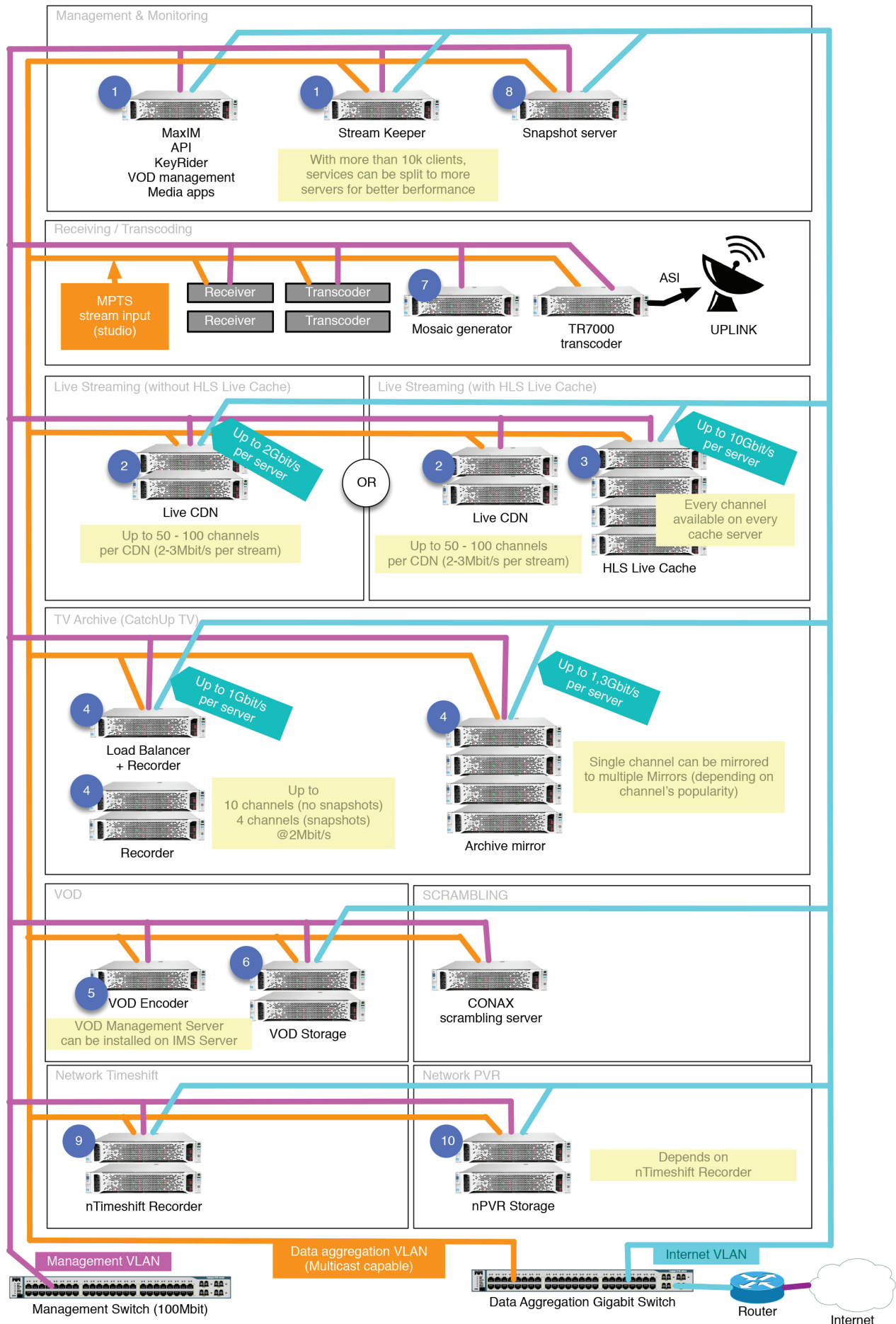
**Multicast Parallel** testing for maximum speed. With default settings, StreamGuard can test 10 channels simultaneously in 3 seconds. That means 200 channels in one minute. Specified number of retries while channel is marked as offline/warning can minimize small network-related problems. Self-monitored 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.

### Antik Stream Keeper

Ajax Web Application User Interface



# Server Schematics & Configurations



# Server Schematics & 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 costs

Recommended  
commercial use (high performance & data integrity)

Tested server (guaranteed compatibility):  
HP DL160G8 / DL360G8 / 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 or 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/s 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 500GB SATA Ethernet: 100Mbit/s OS: Linux Debian 8 64bit	Up to 10 channels 50 output streams		CPU: Intel Core i7 / Xeon RAM: 16GB HDD: SSD 500GB (SATA or PCIeExpress) 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/s 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 17 000 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

- up to 24 channels/1U unit
- SoC HW transcoding system with very low power consumption

### Video Encoding Specification

- 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 Decoding Specification

- H.265/HEVC (Main/Main 10 profile @ level 5.1)
- H.264/AVC (BP/MP/HP @ level 5.1)
- VP9 (Profile 0/Profile 2 @ 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

### DETAILED SPECIFICATION



### 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-Preprocessor 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

# Encoders / Transcoders / Modulators

## Antik GX 5000

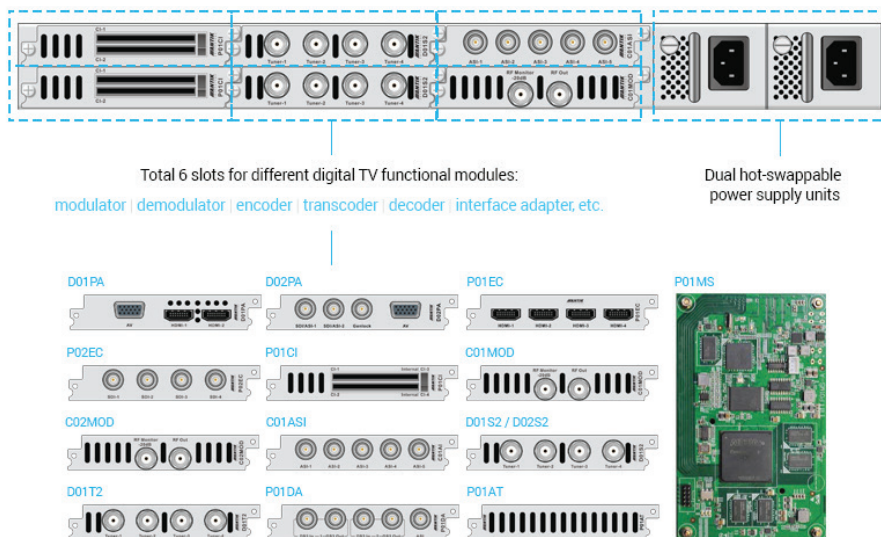
### Digital Contents Processing Platform



**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(DVBTT2)
- 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

### 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)

### 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)

# Encoders / Transcoders / Modulators

## 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 converter
- 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 5308 Receiver

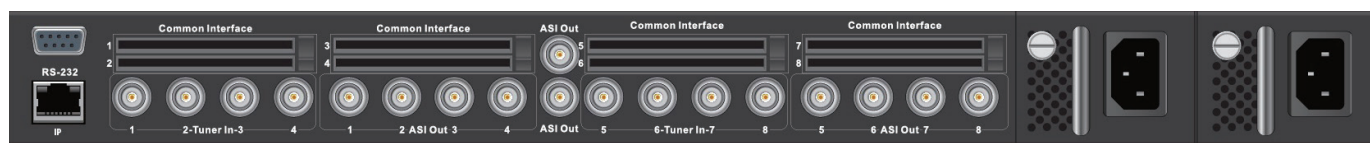
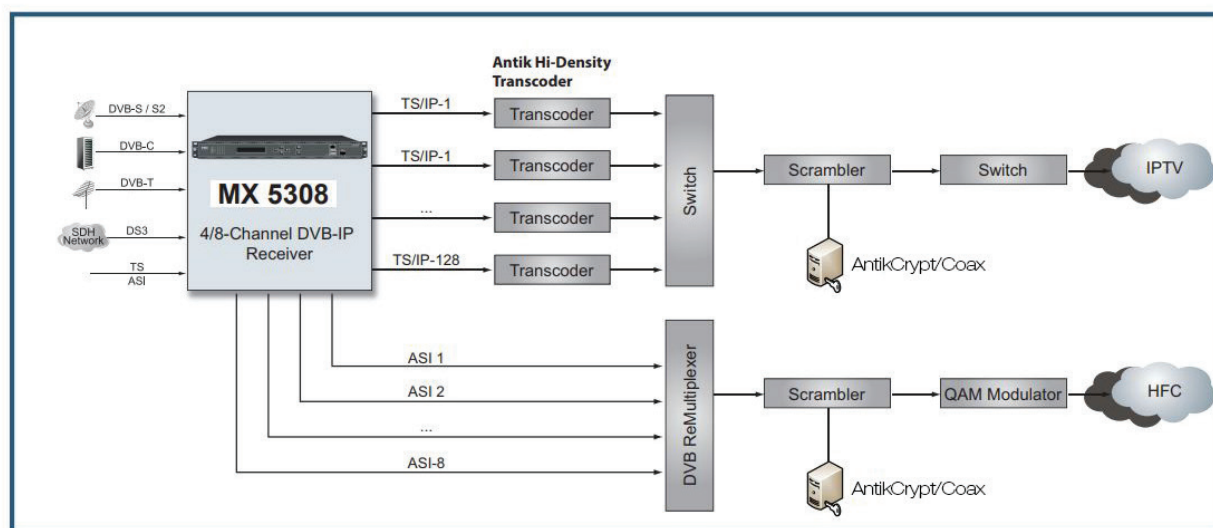
### 8 x Tuner T/T2/C/S2/ISDB-T

The MX-5308 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-5308 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-5308 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 decryption
- 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



# Encoders / Transcoders / Modulators

## 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 & Monitoring

- Connector Type 1×RJ-45, 10/100 Base-T, for equipment IP Control
- Remote Control SNMP, HTTP (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

# Encoders / Transcoders / Modulators

## Antik EN 8000 Encoder

### 4/8-way Integrated Encoder



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 isaccodated in a standard 1U x 19 rack mountable chassis.

### Key Features

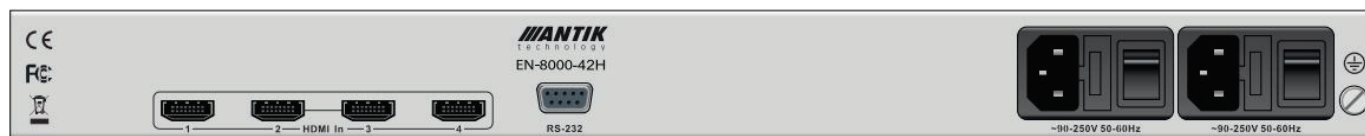
- Compliant with H.264/AVC HP@L4.0 & MPEG-2 MP@ML
- Supports MPTS & SPTS, Re-multiplexed integrated
- Total bitrate up to 400Mb/s at 128 IPTV Mode
- Total bitrate up to 200Mb/s at 32 IPTV Mode with both RJ-45 port
- Total bitrate up to 80Mb/s at Full Duplex Mode
- HD/SD Video Resolution: 1080p, 720p, 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



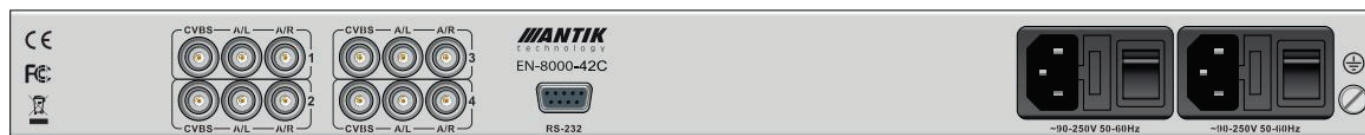
EN-8000-42H



EN-8000-82C



EN-8000-42C



# Encoders / Transcoders / Modulators

## 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(1920x1080)@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:SMPTE656M:3,5~8Mb/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, RTP, SPTS or MPTS
- 10/100/1000 Base-T
- Maximum Bit Rate: 200Mb/s
- Data Encapsulation: UDP,
- 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

### OthersI

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

## ORDER INFORMATION

	Description	Encoder input	Encoder Way	TR/IP (Full Duplex/ IPTV Output	Audio Encode (AAC)
1	EN-8000-82H	HDMI	8	Y	Y
2	EN-8000-42H	HDMI	4	Y	Y
3	En-8000-80H	HDMI	8	N	Y
4	EN-8000-40H	DHMI	4	N	Y
5	EN-8000-82C	CVBS & Audio	8	Y	N
6	EN-8000-42C	CVBS & Audio	4	Y	N
7	EN-8000-80C	CVBS & Audio	8	N	N
8	EN-8000-40C	CVBS & Audio	4	N	N
9	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

*This ultra cost-effective OTT/IPTV or Hybrid DVB+IP box combines a compact design with high performance and low power consumption.*



### Key Features

- CPU 4 x Cortex A53 (15000 DMIPS)
- GPU Mali-450
- 4K HDR or dual Full HD decoding
- High Efficiency Compression Codecs Decoding
  - VP9 Profile 2 Support

### Back panels / Side panel



*Nano 3 OTT - back panel*



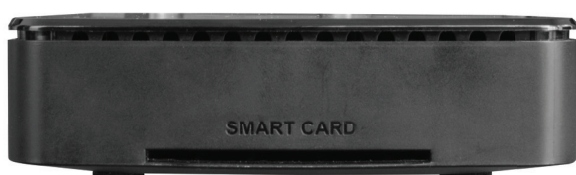
*Nano 3 S (DVB-S2+IP)  
back panel*



*Nano 3 OTT - side panel*



*Nano 3 T (DVB-T2+IP)  
back panel*



*Nano 3S - side panel*



*Nano 3 S/T (DVB-S2/T2+IP)  
side panel*

## SPECIFICATIONS

### Video

- H.265/HEVC (10-bit)
- H.264/AVC
- VP9 (10-bit), VP6/VP8
- 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 (NAAno 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 Ingeragtion

- 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

### Hidden STB with external IR sensor

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



## Antik Mini 3

### Hybrid IPTV +DVB Set-top Box

New ANTIK Mini 3 quad-core Linux / Android set-top box with Hi3798C V200 central processing unit has a great features to satisfy highest demands for video decoding, power consumption, price and performance. It is a 4K HDR or dual full HD DVB & IPTV set-top box with VP9 video decoding at 3840 x 2160 resolution at 60fps. Fully integrated with Antik MaxIM management system.

### Key Features

- Enhanced Host CPU performance (15000DMIPS)
- Hybrid device with IP + DVB tuner (optional)
- L2 managed switch up to 1Gbps
- 4K HDR or dual Full HD decoding
- Decoding and display capability compatible with HDMI 2.0a
- Wifi 802.11 ac Access Point
- Wake on HDMI CEC, IR/BT RC input
- Smart Home HUB (Z-Wave)
- Modem
- OLED display (optional)
- Integrated antenna (SmarHome)



### Back panels / Side panel



Mini 3 Pure IP



Mini 3S



Mini 3 ST



## SPECIFICATIONS

### Highlights

- 4K (2160p60) video support and crystal clear digital audio
- Interactive TV Support - Multicast TV, Electronic Program Guide, VOD, Mosaic
- PVR and Network PVR support
- Major DRM systems integrated
- Segment streaming and buffering for OTT delivery even in low-speed networks
- Hybrid broadcast-broadband TV (HbbTV) support
- Hardware generated Picture-in-Picture
- Intelligent low power consumption management
- Ideal for Digital Signage system

### Video

- H.265/HEVC (10-bit)
- H.264/AVC
- VP9 (10-bit), VP6/VP8
- MPEG-1/2/4
- VC-1/WMV9
- Real 8/9/10
- Divx 3/4/5/6

### Audio

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

### Accessories

- IR Remote control
- Power supply adaptor
- HDMI cable
- Batteries
- Manual

### 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

### Technical Specification

- Dimensions 205mm x 145mm x 50mm (without packaging)
- Weight 540 g (without accessories and packaging)
- Power Consumption 8W
- Power Input 12V/2A DC
- Power Adaptor 90-250V/50-60Hz AC
- Operating Temperature 0°C to 45°C
- Operating Humidity 8%-95% (non-condensing)

### Software Ingeraction

- 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

### CAS/SCRAMBLING/DRM

- AntikCrypt
- Conax
- Widevine

### Application

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

### Inputs/outputs

- HDMI 2.0a
- AV output (CVBS, L+R audio)
- TOSLINK (S/PDIF optical audio interface)
- 4x RJ45 (Ethernet 10/100/1000BaseTx) / 1x RJ45 (Ethernet 10/100BaseTx)
- 1x USB 3.0 + 1x USB 2.0
- CI slot (Mini 3S)
- external IR sensor
- antenna RF input (only on selected models)

### Hardware

- CPU: HiSilicon Hi3798MV200/Hi3798CV200 4x ARM Cortex-A53 (15000 DMIPS)
- GPU: ARM Mali-450/Mali-T720
- DRAM: 2GB DDR4/DDR3
- Flash: 8GB eMMC
- ETH: 4-port GbE managed switch (only on selected models)
- Wi-Fi: 802.11 ac/b/g/n (2.4/5GHz, 2T2R, 867M) + Bluetooth 4.2 (optional)
- 868 MHz SmartHome gateway (optional)
- DVB-S/S2/T/T2/C tuner (optional)
- CAS Card reader slot (optional)
- Modem

# Set-top boxes

## Antik Eco 3C

Super low-cost DVB-C/T box



*Antik Eco 3 DVB-C*



*Antik Eco 3 DVB-T*



*Antik Eco 3 DVB-C  
back panel*



*Antik Eco 3 DVB-T  
back panel*

### SPECIFICATIONS

#### Video

- H.264/AVC
- MPEG-1/2/4
- VP6/VP8
- MPEG-1/2/4
- VC-1/WMV9
- Real 8/9/10
- Divx 3/4/5/6

#### Audio

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

#### Hardware

- CPU: HiSilicon Hi3716MV330 (ARM Cortex-A9)
- DRAM: 128MB DDR3
- Flash: 64MB NOR/NAND
- DVB-C tuner
- CAS Card reader slot (optional)

#### Inputs/outputs

- HDMI 1.4b
- AV output (CVBS, L+R audio)
- 1x RJ45 (Ethernet 10/100BaseTx)
- 1x USB 2.0
- external IR sensor
- antenna RF input

#### CAS/SCRAMBLING/DRM

- AntikCrypt
- Conax

#### 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

#### Application

- Cable TV

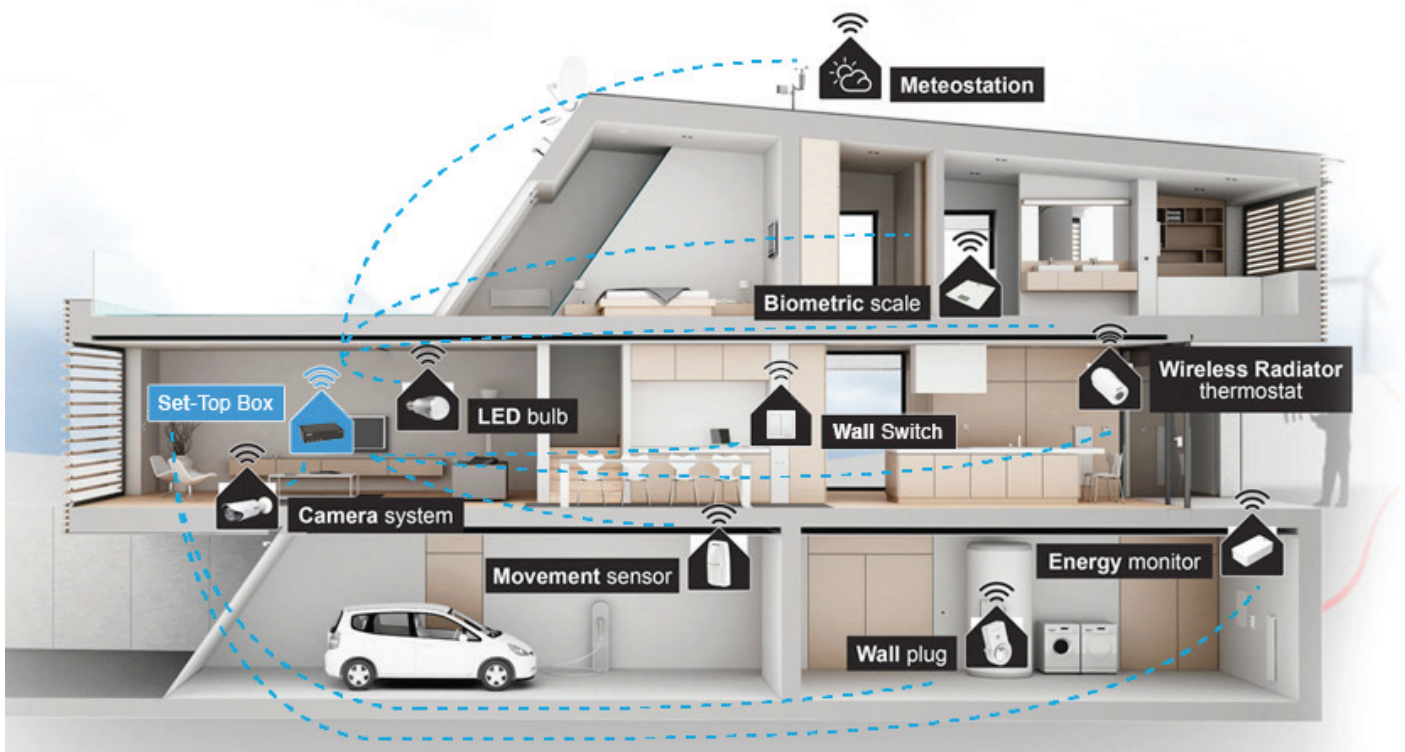
#### Technical Specification

- Dimensions 190mm x 125mm x 30mm (without packaging)
- Power Consumption 6W
- Power Input 5V/1.5A DC
- Power Adapter 100-240V/50-60Hz AC
- Operating Temperature 0°C to 45°C
- Operating Humidity 8%-95% (non-condensing)

#### Accessories

- IR Remote control
- Power supply adapter
- AV cable

**MaxIM  
Middleware  
integrated**



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. Want to see comparison of power consumption of similar households– check it directly on ANTIK TV screen. 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.



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

## Set-top box



# SMART Home

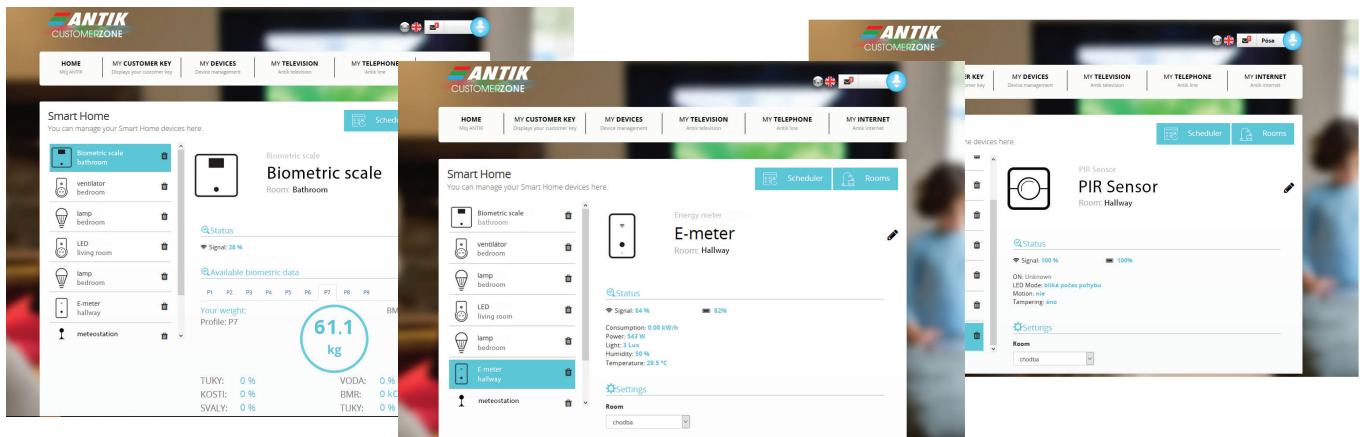
## Mobile Application

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.



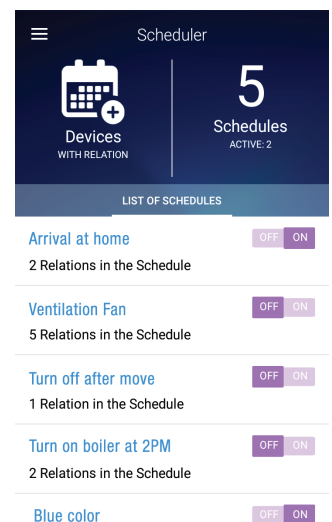
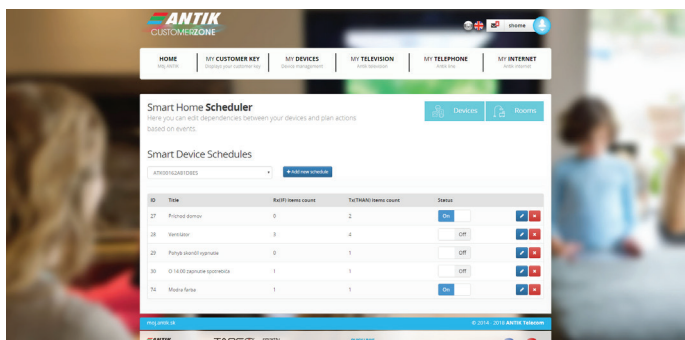
Download ANTIK SmartHome app.

## 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.



## SmartHome Elements

### Energy monitor



Have your home constantly under control. Make an overview of the consumption of your appliances and your whole household, so you can see what appliance has the highest consumption. In addition to measuring consumption, it also measures temperature, humidity and intensity of the light.

Measure the consumption of your refrigerator or your TV by using the Wall plug. Through the LED lights, it will signalize which of your appliances are too costly. Replace them effectively and save on monthly electricity bill. Control any, even non-smart, appliances remotely! Thanks to the mobile application, you not only check but can also comfortably turn them off.

### Wall Plug



### Wireless Radiator Thermostat



Wireless radiator valves provides a convenient way to set the temperature in your home. Remote control even allows you to set up different temperature in every room. You can also plan the change in temperature during the day, or to set up a weekly heating schedule at home.. With Antik Wireless Radiator Thermostat, you save the cost of heating without reducing home comfort.

Brighten up your home with your favorite colors without painting. Intelligent color bulb contains not only white but also color LED, which allows to create light of any color. It works on the LED base with an output of 9 W (white color), which is equivalent to 60 W regular bulb. The bulb has an integrated wireless communication module that allows remote operating

### Intelligent LED Bulb



### Biometric Scale



Maintaining your optimal body weight has always been a challenge. Thanks to biometric scale this process becomes much easier and your goal achievable. Intelligent scale works on the principle of analyzing biometric impedance. Based on this measurement and counting individual variables such as age, height, gender and activity level, the device is able to calculate body fat percentage, muscle mass and water and thus reveal the strengths and weaknesses of your lifestyle.

### Movement Sensor, Door/Window Sensor



Protect your household against the actual distraction. If you often forget to close the window and lock the door, do not worry about the safety of your own home. Intelligent sensor will alert you to an open window and inform about the arrival of an unexpected visit. Set the standby mode as needed. Report on the movement inside the house is displayed in your set-top box or mobile app, giving you an overview of the security of the home.



## SmartHome Elements

### Smart Display



Get a complete overview of the weather and always be ready to head out of the house. It measures both temperature and rainfall, as well as wind direction and speed, humidity or the pressure. Measured values are kept, so you know to evaluate long-term trends and to some extent predict future developments.

Important information or measurement results can be available immediately. Smart Display communicates with a set-top box and gets the data that interests you. In the morning it reminds you today's fitness plan or TV show. Smart Display also alerts you to current weather conditions, so you know what to wear and inform you of an upcoming visit.

The best way to control conventional light circuits is to use ANTIK Wall Switch and make the standard lighting a part of SmartHome. It is possible to manage it centrally through mobile app, or set it to automatically adapt to adjusted impulse from other system devices or time of the day. You can choose from three models, one-pole, two-pole or model with the dimming feature. – plus pridat' fotku jednopólového switch.

### In-Wall Relay Switch Module



Do you need to disconnect oven from electricity, but it is connected behind the kitchen line or the boiler in technical room? Thanks to In-Wall Relay Switch Module, you can manage those hard-to-get electric circuits directly from your set-top box or your smartphone and turning off will take just one click.

Whether it is a radiator or washing machine springing a leak, water can cause a lot of damage in short time. Protect your home from flooding. With the Antik Flood Detector you can quickly detect broken pipe hidden behind the kitchen, or if the flood is coming. You can protect the interior from damages.

### Smart Video Door Phone



Know who is knocking without opening the doors. Find out who was trying to reach you when you are at work. New Antik Smart Doorbell come with everything from live video streaming to two-way communication and home automation compatibility. It lets you see and speak to the people out at the door before opening it and it has implemented infrared night vision that ensures its high performance in the dar.

### Meteo Station



### Wall Switch



### Flood Detector



## Antik IP Wi-Fi/LTE Camera System

Antik video surveillance with Wifi 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 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 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 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 35



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

### 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 85



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

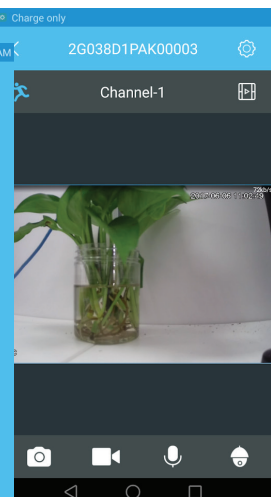
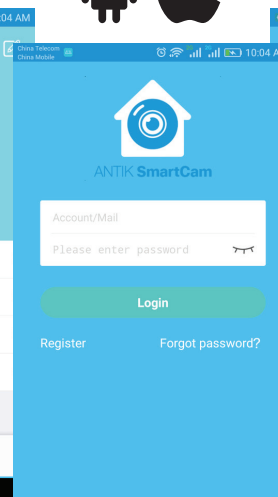
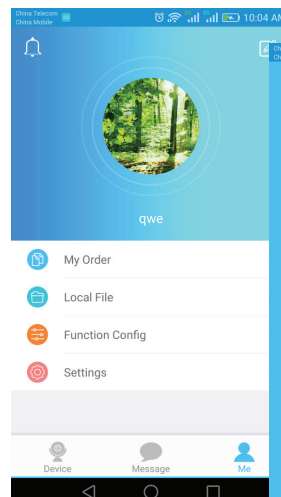
### ANTIK SmartRecord AS1101



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

### SmartCam Mobile Application

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 citizen's 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



# End-2-End IoT/SMART City Platform

## 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 flexible integrate and 3rd party analytic or processing software or visualization platform such as smart-phone, 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

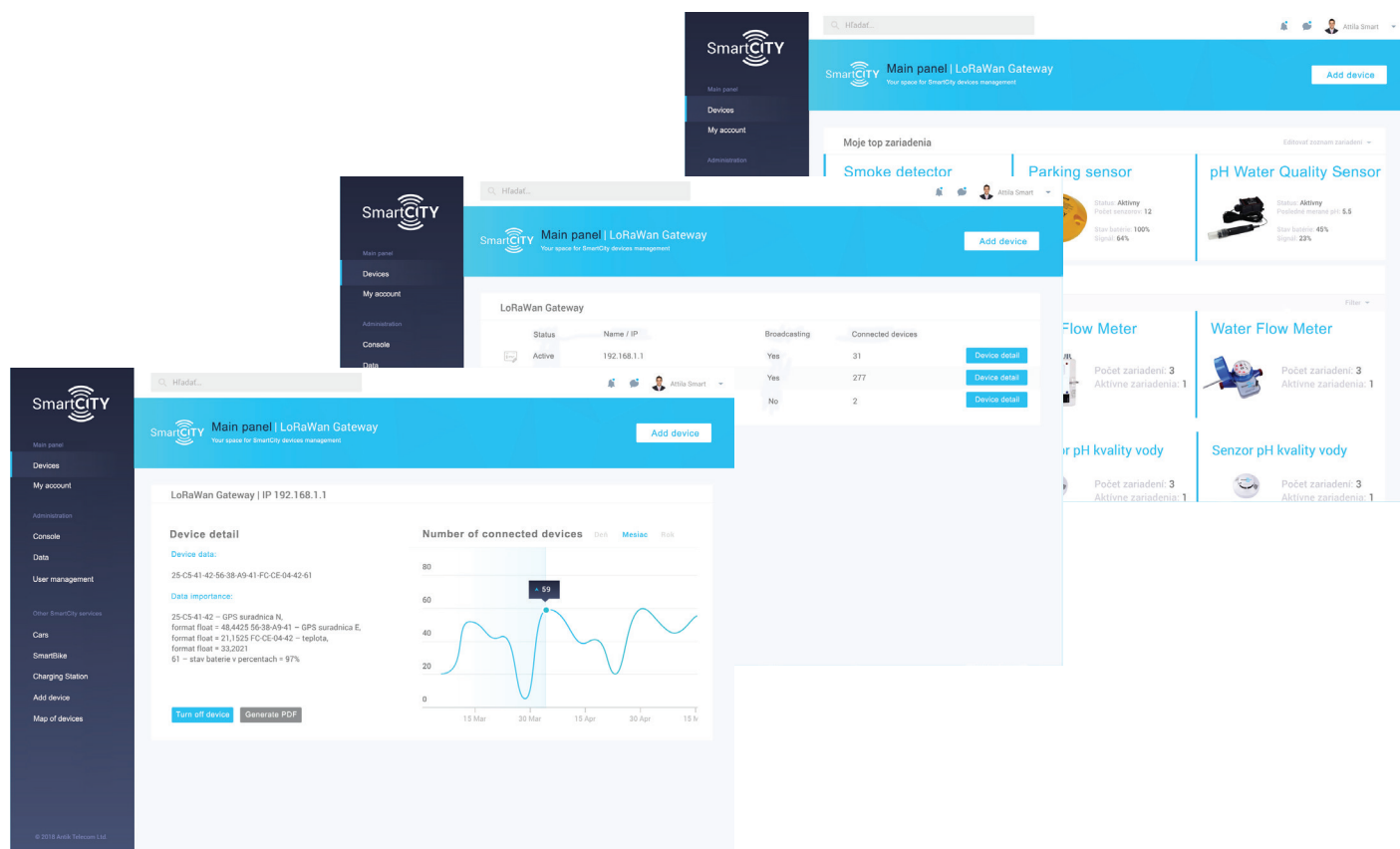
- compact design
- smart measurement
- borderless usage flexibility
- close to zero power consumption
- no service operation
- smart dependences definition across devices

## CONSULTING

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

## 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 cutomers with tracking traffic conditions, monitor energy usage, check water quality and even predict when certain assests- such as lifts and water pumps are due to*



# End-2-End IoT/SMART City Platform

## 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.

### Simplify traffic flow

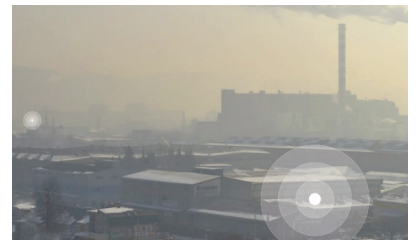
If there is reconstruction on the roads, so city has to close the streets, road signs can easily advice drivers days and hours when it is closed. It will also navigate them where to go.

### Traffic Light Control

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

### 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.

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 vicoty, satisfied citizen and effective company that can follow the history and effectively plan replacing of container according the needs.

### Waste Management



### Optimized refuse collection routes with connected dumpsters

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.

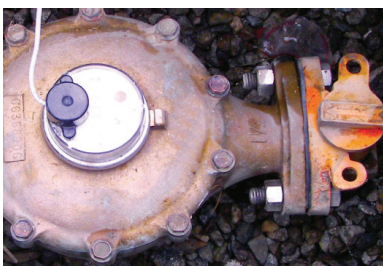
### Smart Cameras

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.

### Portable Water Monitoring

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

# End-2-End IoT/SMART City Platform

## 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 geo-magnetic 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.

Antik LoRaWan abnormal movement sensor is solution to detect unwanted movement of fixed objects. In case of object is moving, sensor alerts you. Sensor uses very sensitive 3 axis accelerometer sensor to detect unwanted movement.

### Abnormal Movement Sensor



### Street Lights control



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.

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.

### Trash Level Detector



### 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.

## 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.

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

### Gas Meter



### 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

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.

### Water Meter



### 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.

## 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.



**SCC-EV-AC-7**

Specific input voltage	-
Output voltage	220VAC $\pm 10\%$
Output power	7kW
Input frequency	50Hz $\pm 2\%$
Short-circuit protection	yes
Overheat protection	-
Battery discharge protection	-
IP Rating	IP54
Working temperature	-25°C~55°C
Ambient humidity	90°C



**SCC-EV-DC-120**

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



**SCC-EV-DC-180M**

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



**SCC-EV-DC-120M**

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

# Antik SmartCityBike

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

## Key Features

- Power of 240W/350W
- Maximum speed 25 km/h
- Trailing throttle for one charging is 35-45 km (depends on the terrain)
- 4 speeds
- Available in two colour variants – white and black
- Load capacity of 120 kg
- Weight: 18 kg
- Charging time 3 to 5 hours
- Disc brakes in front and back
- Charging voltage 110-220V/50-60 HZ
- Aluminium frame
- Easily foldable – fits to every car (size after folding 124 x 22 cm)
- Front LED light, backlight
- Bluetooth smart speaker for smartphone connection



	Model 240W	Model 350W
<b>Dimensions (unfolded)</b>	1200mm*615mm*985mm	1200mm*615mm*985mm
<b>Dimensions (folded)</b>	1235mm*536mm*270mm	1235mm*536mm*270mm
<b>Weight</b>	≤18 kg	≤18 kg
<b>Load capacity</b>	≤120 kg	≤120 kg
<b>Max. speed</b>	20 km/h	25 km/h
<b>Endurance distance</b>	35 - 45 km	35 - 45 km
<b>Charging time</b>	3 - 5 h	3 - 5 h
<b>Battery capacity</b>	8.8AH	8.7AH
<b>Battery type</b>	lithium	lithium
<b>Rated voltage</b>	36V	48V
<b>Rated power</b>	250W	350W
<b>Engine type</b>	brushless motor with gears	brushless motor with gears
<b>Torque</b>	6.6 N.M	6.6 N.M
<b>Protection against overrun</b>	13A ± 1A	13A ± 1A
<b>Protection against voltage</b>	30 ± 1V	40 ± 1V

**4K HDR**



## Integrated PMS:

- Oracle
- Comanche
- Horec
- Hores
- Hotel Time
- Samsung
- IDS

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



## Top-level entertainment for your 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

# End-To-End IPTV for your property

## 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

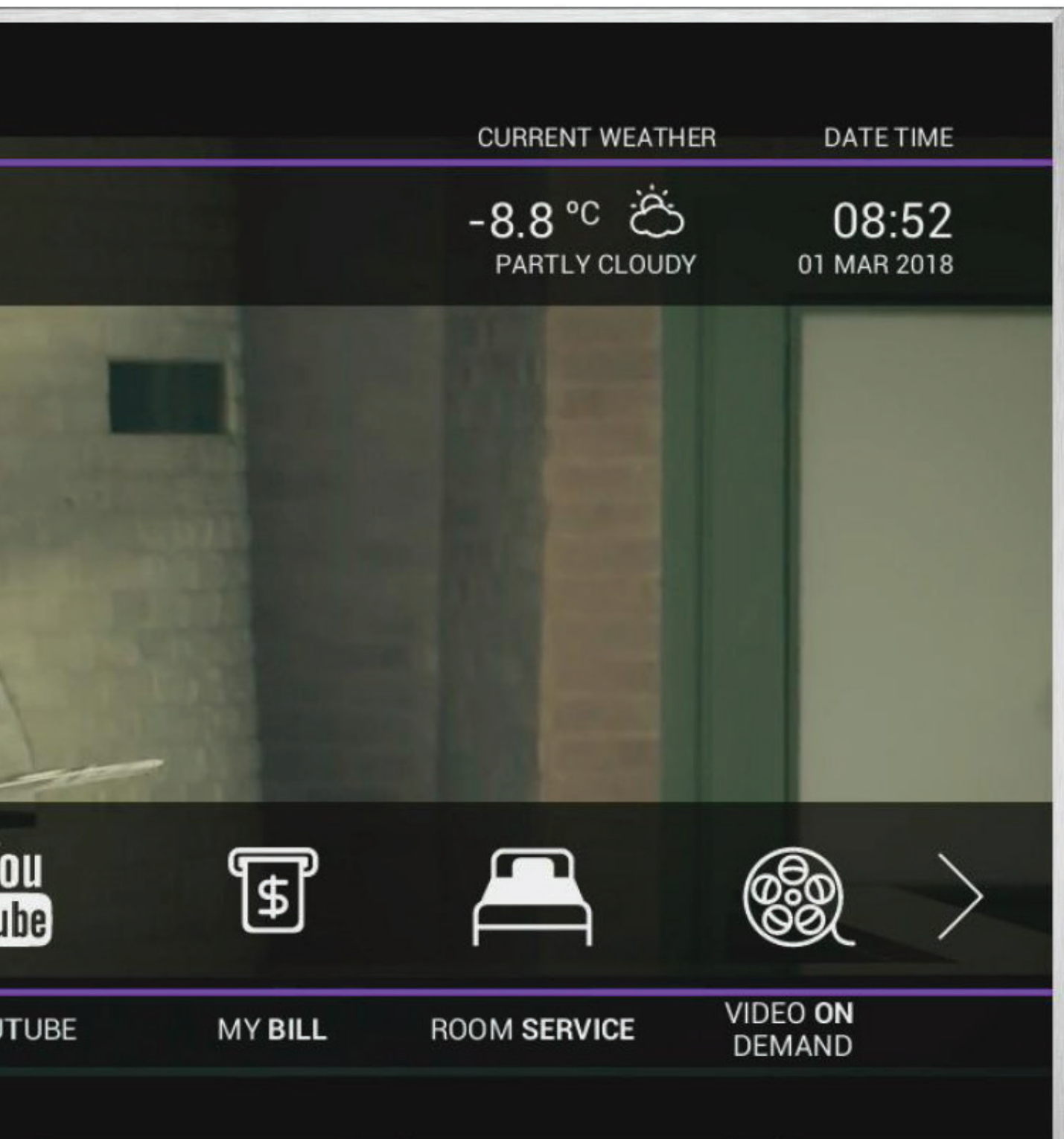
Easy to navigate customisable interface with direct access to food delivery, video on demand, my bill and other upsell and cross-sell options.

## 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

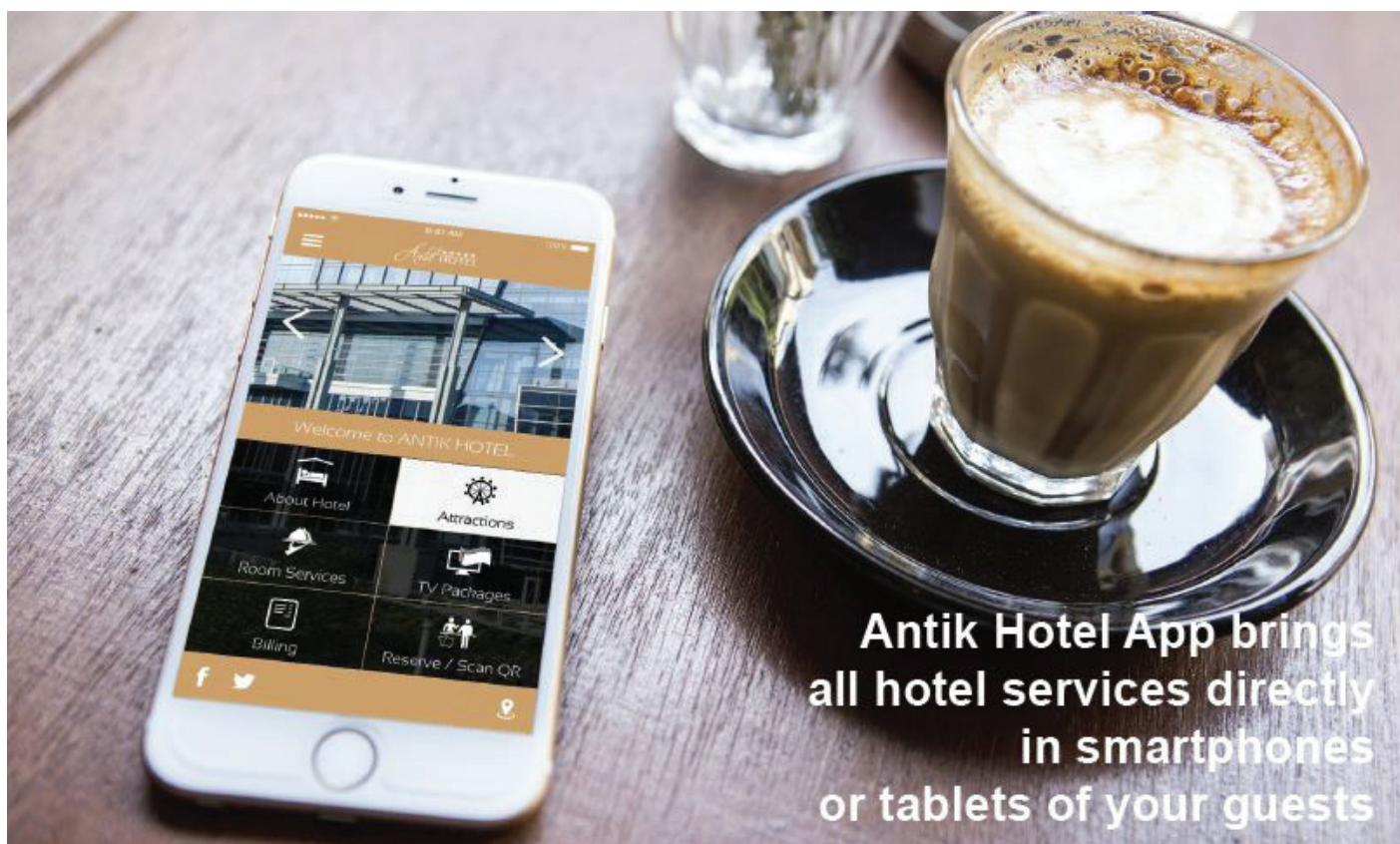
Thanks to integration with your hotel PMS, all guest orders ordered through IPTV or other hotel departments will appear on one simple table for guest to review before check-out.

## Interactive TV

UHD TV, Electronic Program Guide, thimeshifted 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 brings  
all hotel services directly  
in smartphones  
or tablets of your guests**

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

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!

## Antik Hotel App has the solution

### Maximize guests' spending

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

### Gather guests' feedback

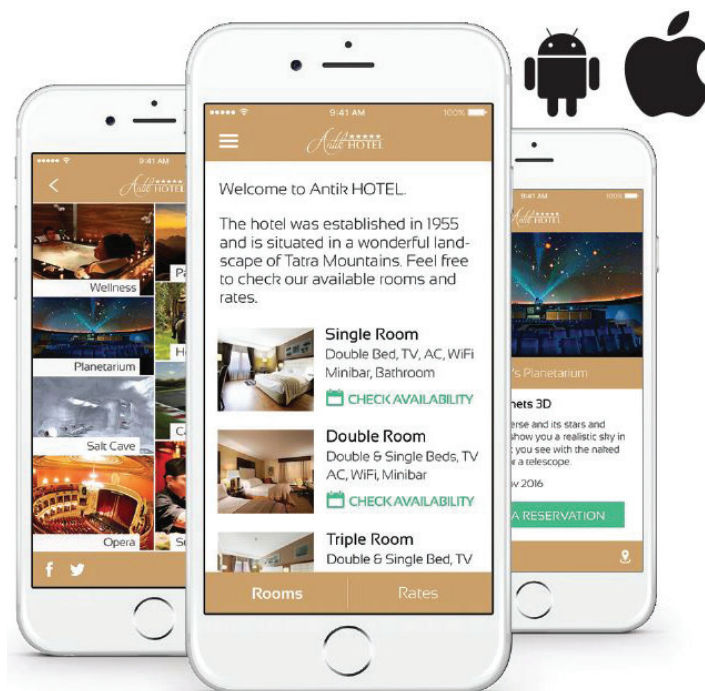
Learn how guests feel about your hotel and its services and eliminate negative reviews.

### 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 Advertising

## Totem 55" single-screen outdoor



**Typical power consumption:** 290 W (day), 160 W (night)  
**Screen size:** 139 cm (55")  
**Inputs:** HDMI, DVI, VGA, USB  
**Weight:** 185 kg  
**Dimensions:** 880 x 230 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, Hotel Lobby Navigation



# ANTIK Event navigation system

State-of-Art digital content delivery system to improve your visitor 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

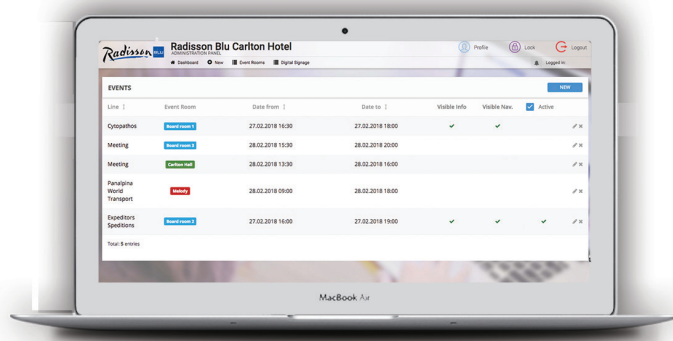
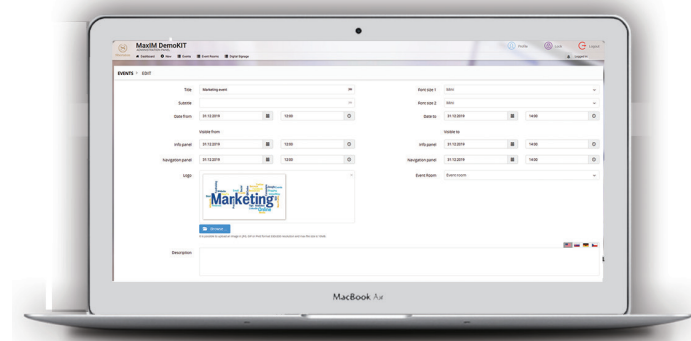
## Content Management System MaxIM

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.

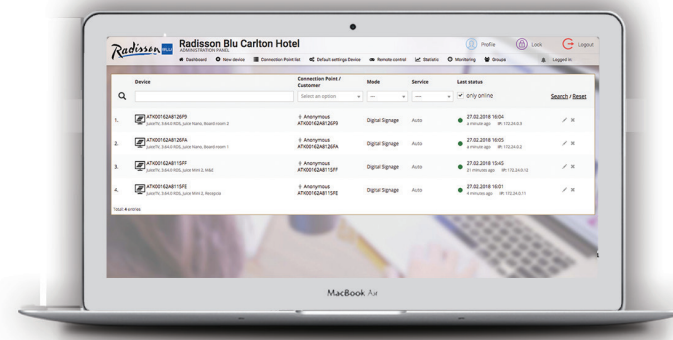


# ANTIK Event navigation system

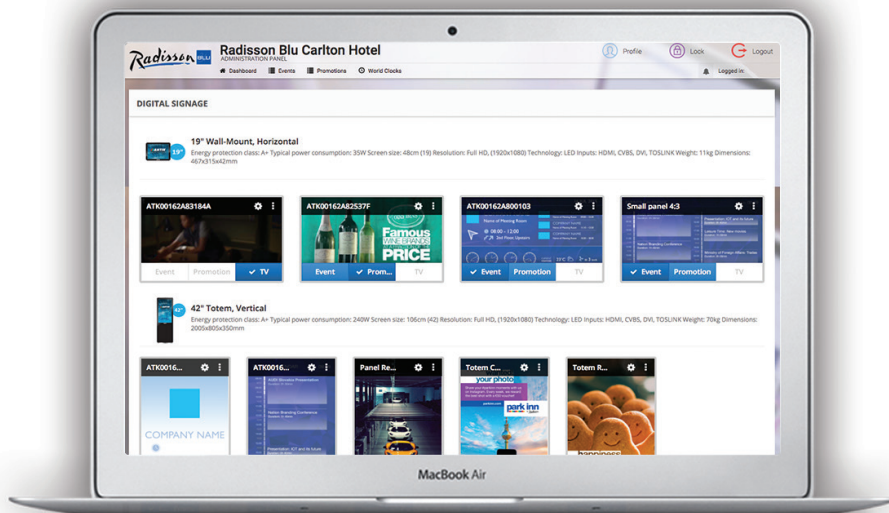
## EVENT PLANNING TOOL



## REMOTE SCREEN CONTROL



## ONE-CLICK CHANGE OF SCREEN ROLE



# ANTIK Event navigation system

## Variety of templates

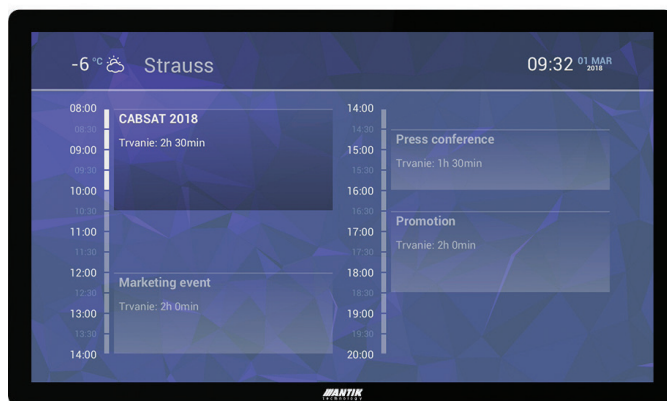
Navigation totem



Room entrance screen



Room entrance daily schedule



Room entrance with advertising



Vertical navigation screen



Vertical navigation totem combined with advertising



Smart cleaning and maintenance under control-anywhere



## KEY FEATURES

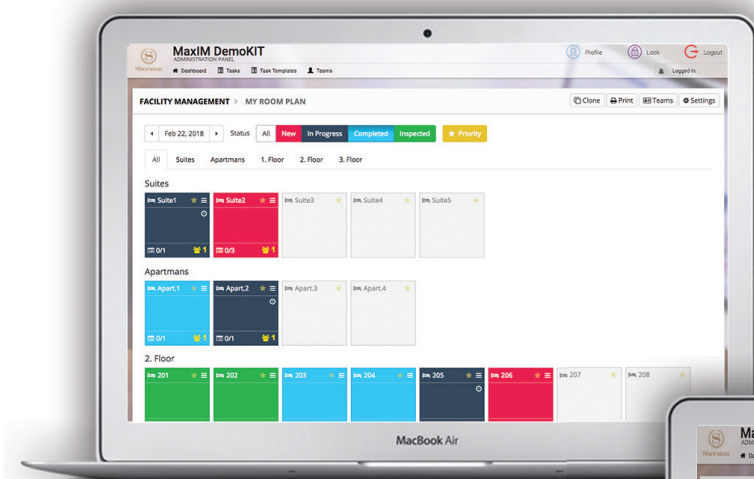
- automated housekeeping tasks planning tool
- personnel task allocation cloning to simplify daily routines
- daily tasks status under control in dashboard
- repeating cleaning tasks templates definition tool
- fully integrated to major PMS
- room maintenance tasks queues
- PC, Tablet, SmartPhone and TV apps for managers, inspectors, maintenance and housekeepers



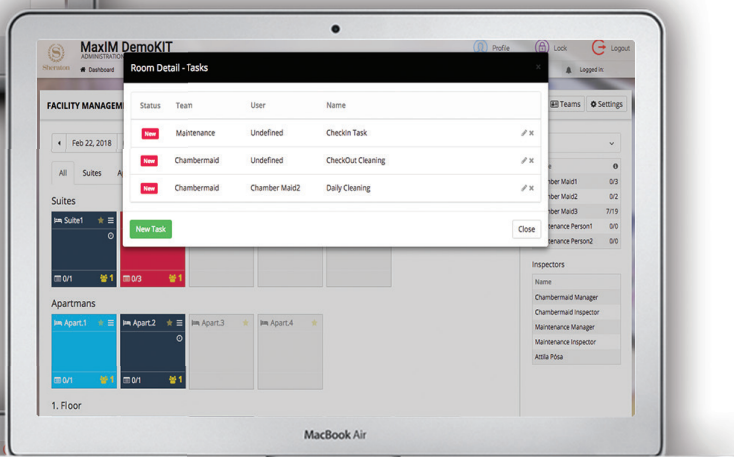
# ANTIK Housekeeping and Facility Management

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.

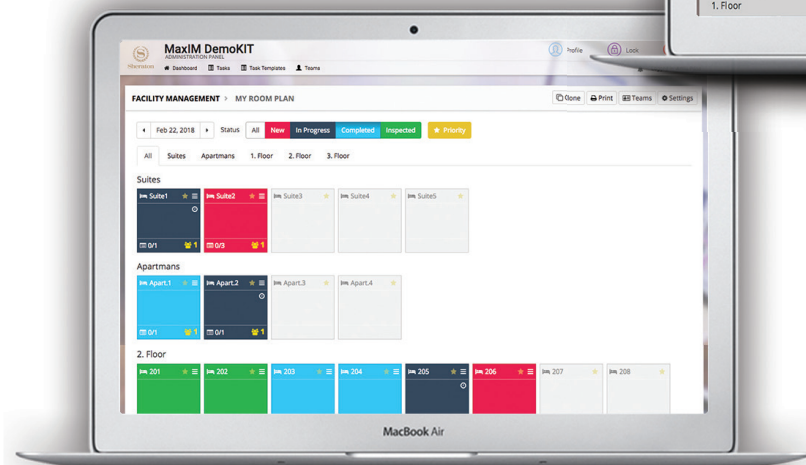
## Housekeeping Dashboard for Inspectors/and Managers



Tasks allocated to room

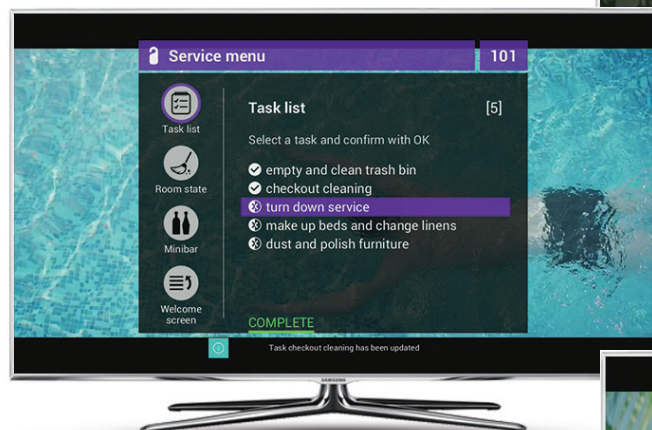


Room plan

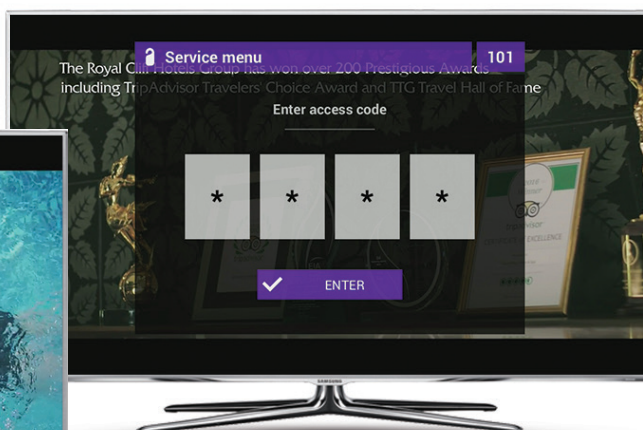


# ANTIK Housekeeping and Facility Management

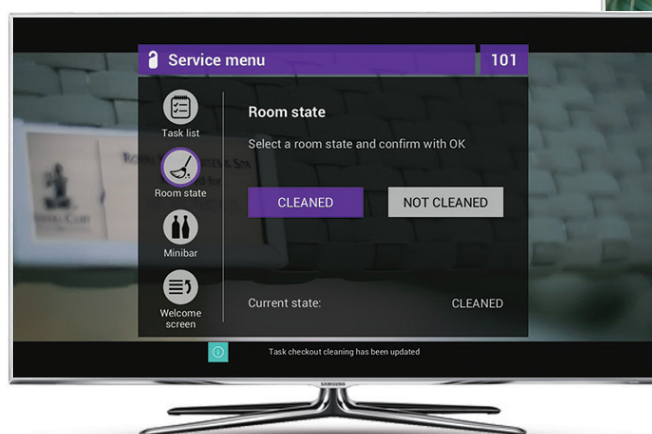
## Housekeepers Service menu on guestroom TV



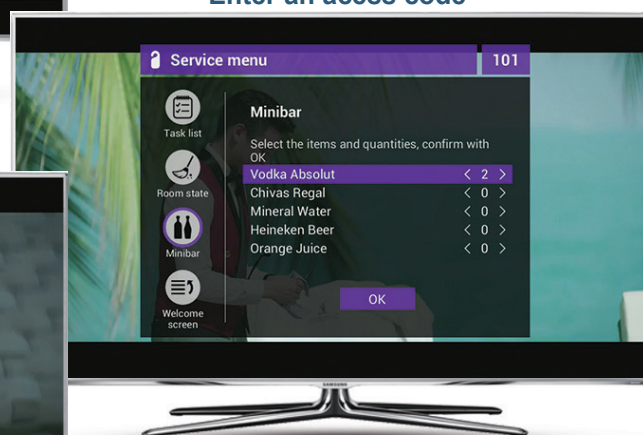
Task list



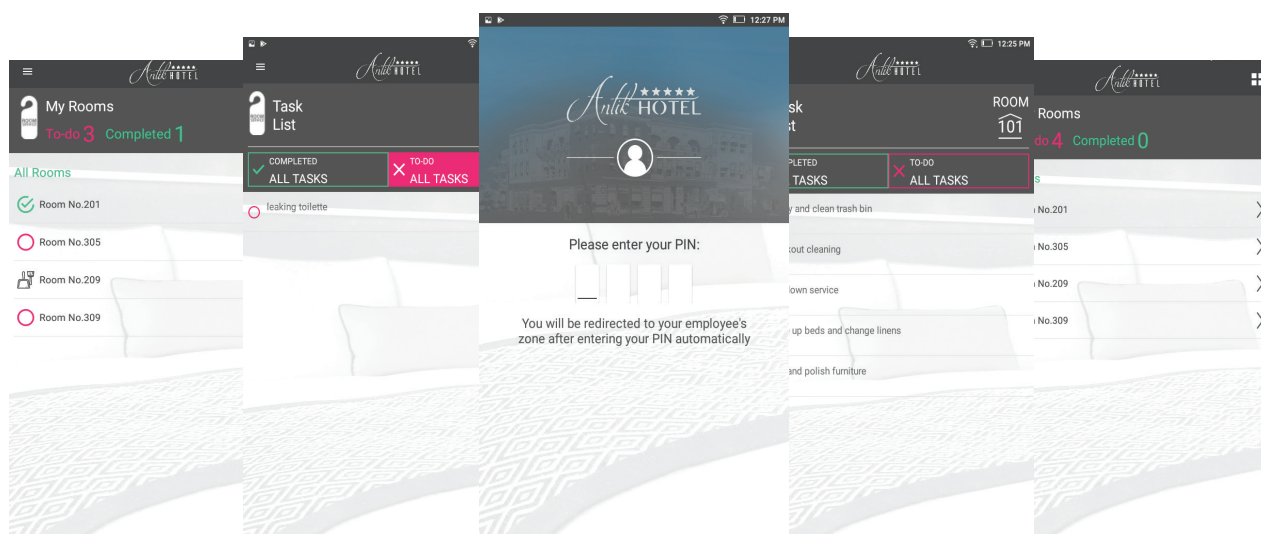
Enter an access code



Room state - cleaned



Mini bar - add an item



Housekeepers App  
for  
Android Smartphone

Maintenance Engineer  
App for  
Android Smartphone

# ANTIK Passenger Infotainment System

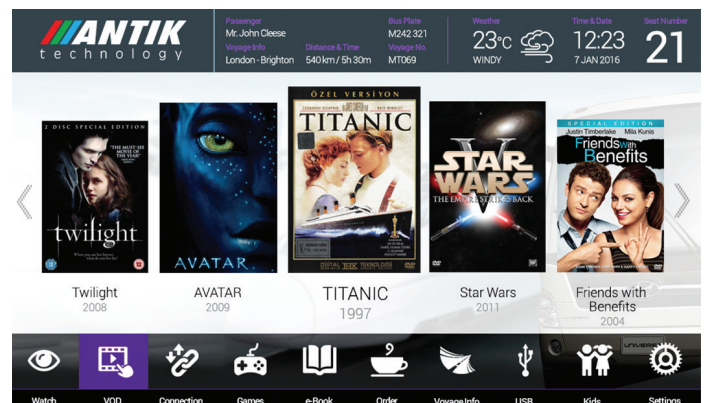
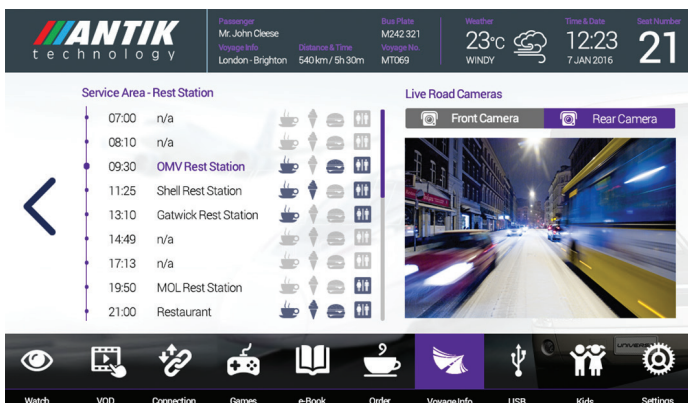


Grant your customers an enjoyable journey with **Antik Infotainment System**

Let us introduce our new interactive IPTV solution – ANTIK Infotainment system for public transport. Explore new dimensions of active travelling with relaxation, fun and socializing all in extraordinary comfort.



## INFORMATION & ENTERTAINMENT



# Antik Passenger Infotainment - BYOD



## Key Features

- On demand Video and Music - VOD, MOD
- E-books, Social networks and Games
- Up-to-date Voyage information
- Low running costs
- State-of-art features
- Easy and fast updating of content
- Easily accessible
- Food Order

Transform your vehicles into entertainment friendly ones while minimizing installation costs. Use devices of your passengers to entertain them and provide information about the journey directly on their smartphones or tablets.



E-books



Games

## 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

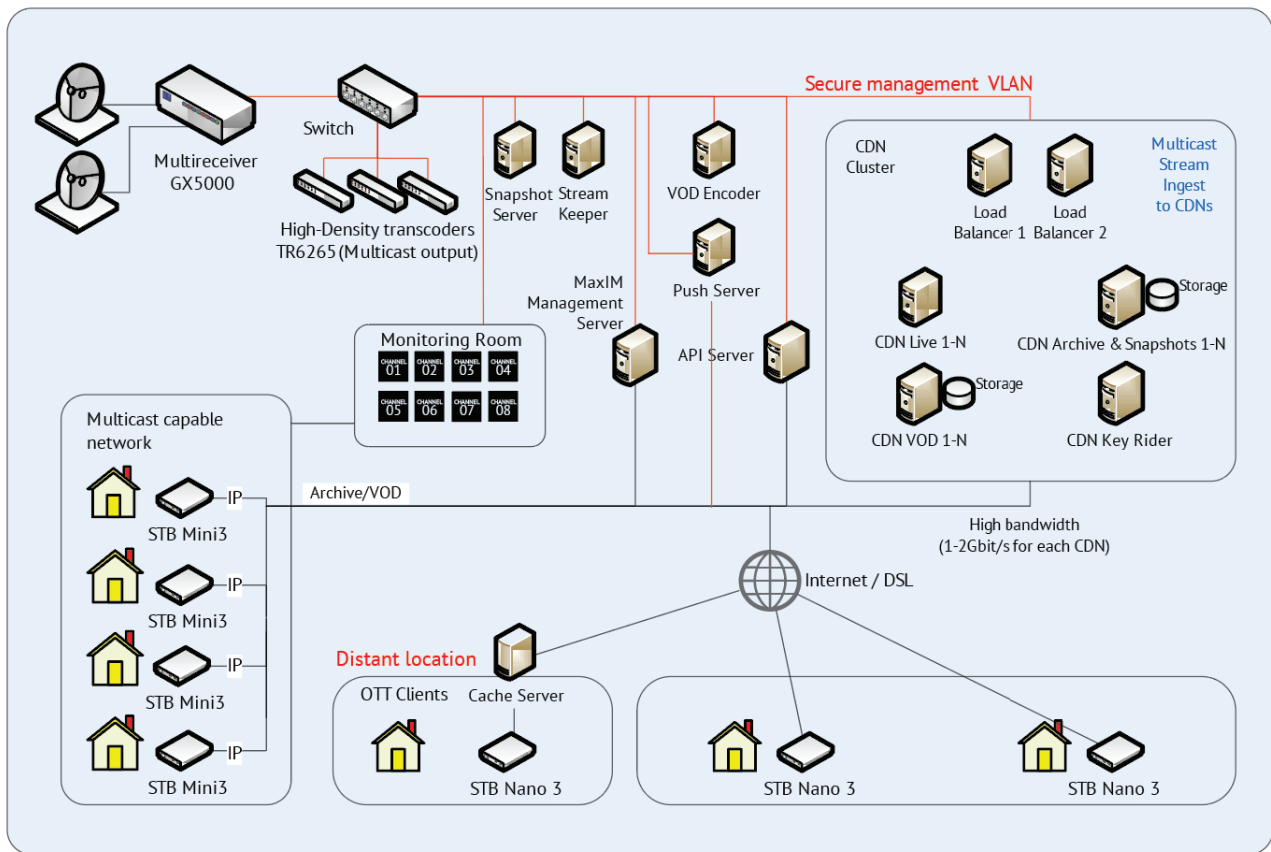
- MaxIM Middleware Management System
- GX5000 - IRD, HDMI Encoders
- TR6265 - HEVC Transcoders
- Live streamers - HLS streaming of linear TV streams
- Archive System - Catch-UP TV
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- nPRV System
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- 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

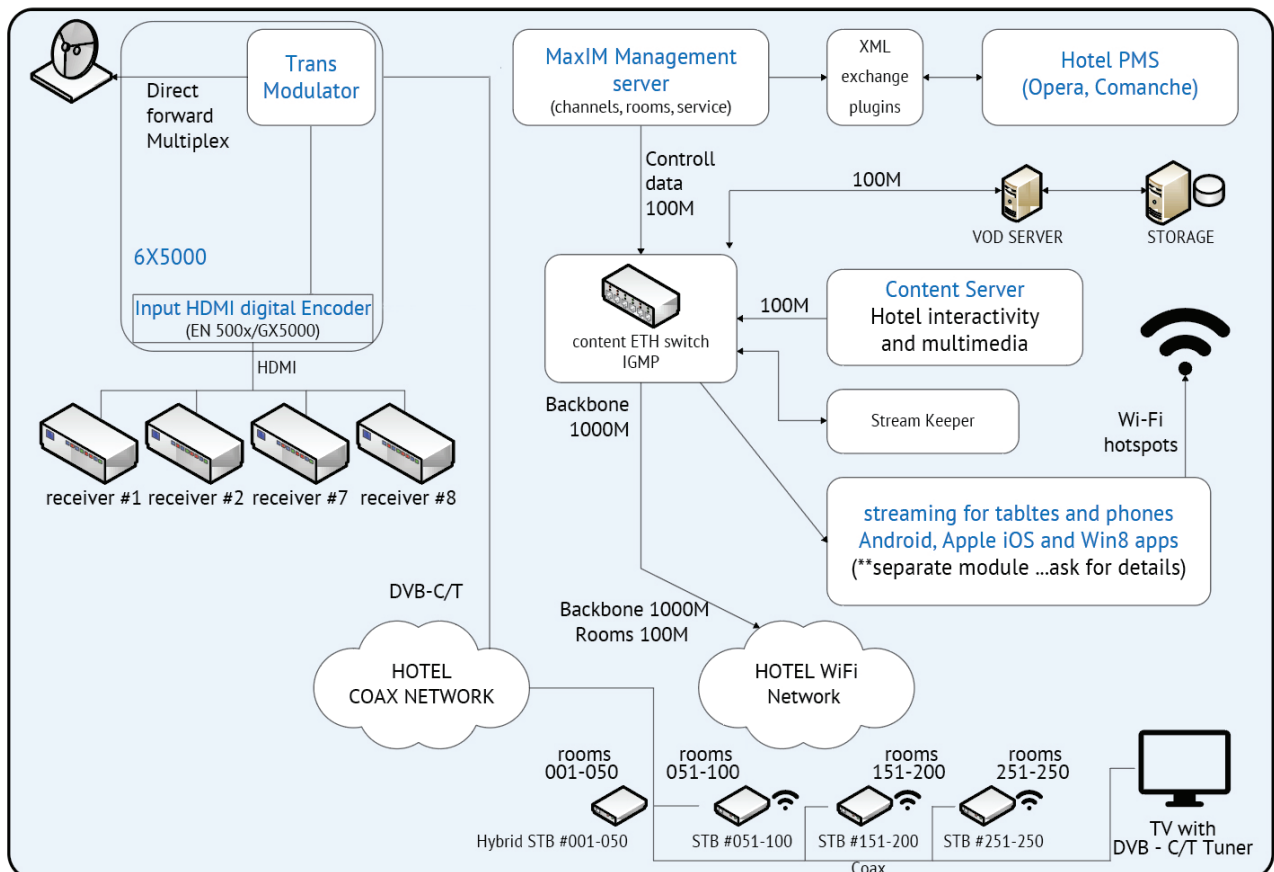
### Coax Network with wifi or non-multicast IP network

- 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

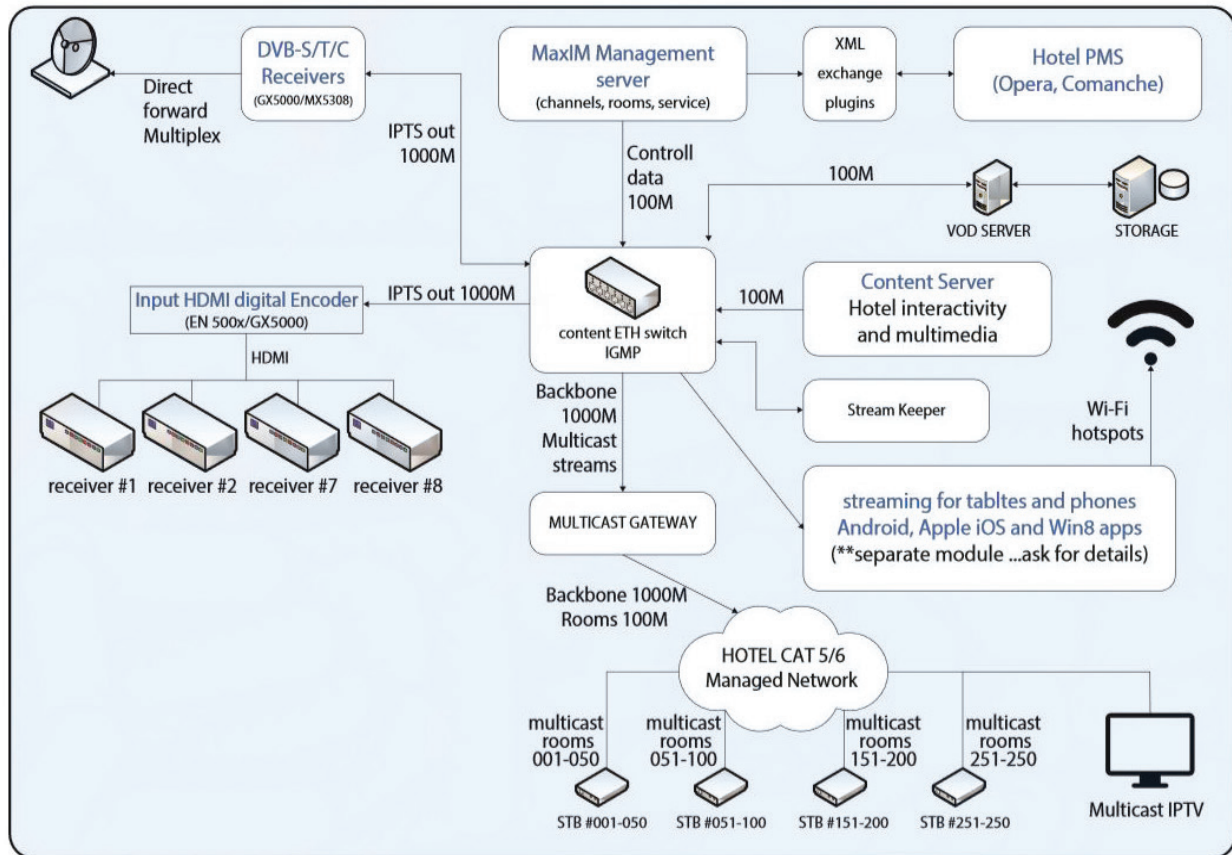
## Telco/ISP/OTT/ANTIK Digital Headend



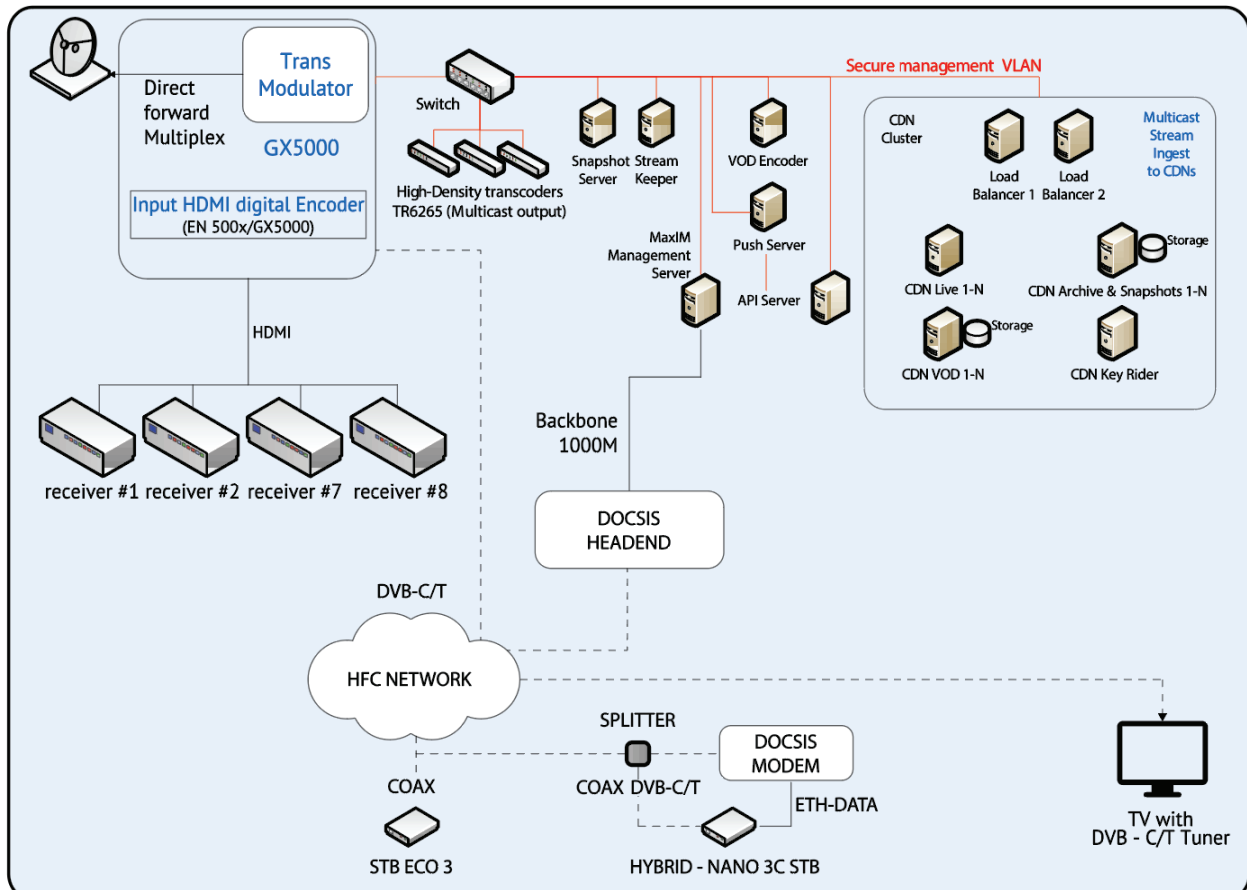
## Hospitality Cable+IP Scenario



## Hospitality IPTV (Hotels, Hospitals, Schools)



## Cable Operator (DVB-C/T + IP)



# Schemes

## Digital Signage Scenario - Public Internet



## Digital Signage Scenario – Corporate Network



## 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 net-working specific to multimedia delivery.

*To start our cooperation contact us directly under [info@antiktech.com](mailto:info@antiktech.com)*

# IPTV DemoKIT 6.0

## 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 management 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.

## 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 Mini 3	1
Antik Nano 3	1
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	
<b>Total pcs</b>	<b>16 pcs</b>
<b>Total weight</b>	<b>5 kg</b>
<b>Total price</b>	<b>\$ 665</b>

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

- 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

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ANTIK TECHNOLOGY (CY) LTD.

Account number: 357-029048-326

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### CUSTOMER:

Contact Name:

Tel. Number:

Company Name:

Delivery Address:

E-mail:

Signature:





[illegible]

## **ANTIK Technology Europe**

### *Headquarters*

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040 01 Košice  
Slovak Republic

**Phone:** +421 55 30 12345  
**E-mail:** [info@antiktech.com](mailto:info@antiktech.com)

## **ANTIK Technology (S) Pte Ltd** *SEA Rep Office*

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**Telephone:** +65 96162725  
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**Xinshiqiao, Guihua Village Guanlan Town**  
**Bao'an Dist, Shenzhen City,**  
**China, PRC**

**E-mail:** [info@antiktech.com](mailto:info@antiktech.com)

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