

# IPTV Solutions 2016

IPTV Head End Streaming servers Middleware Set-top Boxes Global TV delivery



Telco/ISP - OTT Broadcasting STB&Mobile Apps - Hotels - Advertising





ANTIK Technology develops End-to-End IPTV / OTT Solutions for operators, content providers and retailers. 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.



ANTIK's IPTV products are supported by the team of more than 150 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 Shenzen, 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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## IMS / Streaming / VOD

## Antik IPTV Management Server

## The power of Antik Technology!



Antik Technology presents professional cost-effective SW solution for seamless management of your Antik set-top box network. Antik IPTV Management Server is corner stone of Antik Middleware Server Family. You can easily define your channel packages, configure all or selected customer's STBs, collaborate with other part of Antik Server family such as Antik Archive Servers, AntikMosaic Servers or VoD servers. Management Server SW can be easily connected to your billing or customer care application so your user's set-top boxes can be automatically activated and monitored using same software your employees are familiar with. Don't hesitate to request a licensing offer specially designed for your IPTV project.

## **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 succesfully 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.

## Antik Video-On-Demand Media solution

#### **End-2-End VOD for OTT and closed networks**

End-2-End system for 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 lower quality internet networks. Replication SW enables you to hold the VOD data load under control around-the-clock and ensure non-stop operation even in the unlucky situation of partial server hosting drop-out. This video content will start immediately, user doesn't need to wait for downloading full movie as it is instantly streamed to end-devices.



## Scrambling / Monitoring

## Antik KeyRider Scrambling / Stream Protection

## Protection management for your content monetization

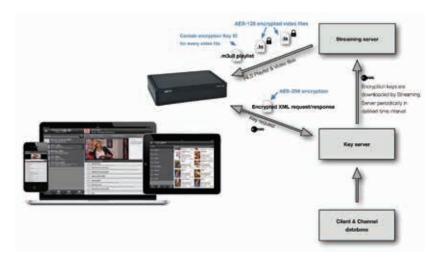
Protect your system against unauthorised viewing and dangerous server overflow. Uses strong AES 128 encryption required by content owners.

Key Server defines keys and assign them to specific channels. Key server continuously generates new version of keys in defined interval (for each key the interval can be defined independently) - key rotation. Media Streamer periodically downloads new versions of keys and encipher the channels which it finds in keyserver definitions using strong AES-128 algorithm. For mediaplayer decipher there is in playlist KeylD for each video segment included. Player asks KeyServer for the exact key using http XML request whichis protected by even stronger AES-256 algorithm. KeyServer answers with the key or not based on the client database.

For communication with KeyServer each client has assigned unique cipher key. In case of compromising unique end-user device i tis possible to block this device separately, not to endanger the whole system. To allow to operate 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



## **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.).



## Encoders / Transcoders / Receivers

## Antik Encoder FN 4900

#### Up to 8 simultaneous programs



Antik Encoder EN 4900 is an integrated high density MPEG-2 Encoder. Eight streams of baseband Standard Definition (SD) real time A/V programs could be encoded simultaneously. These encoded streams could be re-multiplexed with the stream from its ASI input port. The final re-multiplexed Transport Stream (TS) is available at its Gigabit TS over IP port and ASI output port.

- Support 8AV, 1 ASI Input
- Support MPEG2 format encoding
- Support PAL NTSC format
- Support Maximal 108Mbps ASI input
- 0.8Mbps~20Mbps each channel
- Support D1, HD1, 2/3D1, 3/4D1 resolution
- Support multiplexer function
- Support ASI and IP output
- Support Keyboard and LCD operation
- Update device through NMS port

## Antik Encoder FN 5004/5008

#### 4x MPEG4 AVC/H.264 HD Encoder



Antik Encoder EN 5004 / 5008 - 4 / 8 in 1 MPEG-4 AVC/H.264 HD encoder is a professional HD audio & video encoding and multiplexing device with a powerful functionality. It has 4 / 8 channels HDMI (or SDI) input interfaces, supporting the MPEG4 AVC/H.264 High Profile code format & main Profile code format and 1 ASI input. This device can simultaneously encode 4 / 8 channel HD programs; moreover, it has an ASI input and can multiplex the input TS with the 4 encoded program to generate the ASI and the IP output. Also, the PSI/SI information can be inserted into the MPTS output. In conclusion, its high integrated and cost effective design makes the device widely used in a variety of digital distribution systems such as the CATV digital head-end, the satellite and the terrestrial digital TV, etc.

- Support AVC/H.264 High Profile Level 4.0 video encoding, Advanced video pretreatment algorithm
- Support MPEG1 Layer 2, HE-AAC (V2), LC-AAC audio encoding
- 4/8 channel HDMI (or SDI) inputs and 1 ASI input with Mux
- Support PSI/SI editing and inserting
- Support VBR or CBR video bitrate mode
- Support 720P, 1080I, 1080P HD video format
- Support ASI output MPTS or 4 SPTS
- Support IP output (UDP) MPTS and 4 channel SPTS, unicast/ multicast
- Support IP null packet filter
- Support PID filter and transparent transport
- Real- time effective output bit-rate monitoring
- Support update device through NMS port
- Support LCD / keyboard operating, and network management (SNMP)

## **Antik** Transcoder TR 6015

#### H264 IP to IP / (up to 120CH)



The Antik's TR 6015 HS/SD Multi Channel Transcoder based on an ultra-fast ViXS chipset offers you a great tool for your project. It's capable of transcoding/encoding up to 15 SD or HD channels. You don't need to buy many devices, and thus avoid filling too much room. The Slim 2x1U Rack design will save you space and money. You can have up to 8 transcoding modules of whoch each can transcode 15 TV channels. This solution is great for any IPTV project, from typical Telco headends to large scale OTT projects. It is an extremely cost effective solution per channel.

- Real time transcoding of up to 15 video streams
- Support for MPEG4 and H.264 Video Encoding
- Multi-format IP2IP video transcode (H.264, MPEG2)
- HD Encoding up to 1080i
- 2x1U slim rack-mounted design
- Low power consumption
- 10/100/100 Base-TX Ethernet network interface
- Front panel with OLED display
- WEB-based remote configuration and control (HTTP)
- All SD and HD resolutions support
- Support of wide range of bit rates: 6Kbps to 40 Mbps
- Compatible with all major television broadcasting standards: NTSC, PAL, SECAM

The Antik TR 6015 HS/SD Multi Channel Transcoder is a professional tool for headend application developed to enhance transcoding efficiency and decrease its time delay. It supports a wide range of operating programs, from low to very high bit rates. The device features the latest advancements in video encoding, performing to H.264 and MPEG specifications. The multiprofiling option can secure various, impressive & flexible transcoding functions, which can be controlled in order to provide a plenty of transcoding applications.

All the features are well supported by the Antik Transcoder Web Management, where you can easily configure the settings for your optimal performance. Front panel with the OLED display also offers another way of managing or checking the status of the device. All together, this system is an extremely cost effective solution per channel.

## **Antik** MR 9200/9400

#### Multireceiver



Antik MR 9000 is a compact modular digital TV headend that includes professional MPEG-2 and MPEG-4 AVC/H.264 SD/HD IRD, MPEG-2 and MPEG-4 AVC/H.264 SD/HD Encoder/Transcoder, Re-Multiplexer, QAM/COFDM Trans-Modulator, Dual Channel Analog Modulator, DVB Scrambler and so on. Within a 4U×19" chassis, it provides 8 slots for any type of modules and 2 redundant power supply units.

Thanks for its flexibility and high density, Antik MR 9000 offers operators the advanced headend architectures in the marketplace for delivering analog and digital broadcast services to their subscribers. Coming with more new modules, Antik MR 9000 is most suitable for future multiple network architectures: streaming and multiplexing of digital content over IP based networks and conversion of digital content for analog networks.

- DVB-S2/S, DVB-S, DVB-C, DVB-T2/T IRD modules with CI
- DVB-S/S2T/T2 to DVB-C QAM and DVB-T COFDM trans-modulator module
- MPEG-2, H.264 HD/SD encoder and trans-coder module
- 8 Way re-multiplexer module
- DVB Simulcrypt, BISS-1, BISS-E scrambler module
- Rich interface with ASI, IP, SDI, YPbPr, CVBS, XLR
- Web, SNMP Remote Control or handheld programmer unit local control
- 4RU 19"chassis compact modular design, supporting up to 8 modules
- Functional module hot-swappable
- Redundant power supply
- Intelligent cooling system with temperature
- Stand-alone function of each module
- Cost-saving by backward compatible with new modules
- On site software update through IP

## Antik MX 5308

#### Receiver



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.

- 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
- 8×DVB-CI Slots, multi-program decryption, BISS-1 and BISS-E decryption
- 8xASI output the transport stream from CI Slot1 to CI Slot8 or BISS decryption
- 1xchannel full duplex TS over IP or 9xchannels 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

## Set-top boxes

## **Antik** Nano

## **NEW Low-cost Multicast / OTT / Hospitality HD IP Set-Top Box**

Antik Nano is ultra low-cost IPTV set-top box based on STi Liege chipset in miniature design, which can fit to your hand. It's ultra cost-effective solution because of higher perfomance and low power features. Device in tiny design and unbeatable price with enhanced video decoding perfomance supports dual H.264 HD decoding (2 x HP @L4.1, 1080i/720p). It allows HD web content video decoding including DivX and MP4pt2 to 1080i30 and 3DTV decoding with HDMI1.4b support.

- Enhanced Host CPU performance (1200DMIPS)
- Faster DDR performance with DDR3 support
- Dual H264 HD decoding
- 3DTV decoding and display capability compatible with HDMI1.4b
- · Low power on standby
- Wake on HDMI CEC, IR/UHF RC input



## **Antik** Mini 2

#### Pure IP or IP&DVB / ISDB-T box for ISP / OTT/Hospitality

Antik Mini 2 with STiH207 is cost-effective solution because of higher performance and low power features target of < 0.5 W set-top box total standby power in controller passive standby mode. Device with enhanced video decoding performance supports dual H.264 HD decoding (2 x HP @L4.1, 1080i/720p). It allows HD web content video decoding including DivX and MP4pt2 to 1080p30 and 3DTV decoding with HDMI1.4b support.

- Enhanced Host CPU performance (1200DMIPS)
- Hybrid device with dual DVB tuner + IP (optional)
- L2 managed switch up to 1Gbps
- Dual H264 HD decoding
- 3DTV decoding and display capability compatible with HDMI1.4b
- Low power on standby
- Wake on HDMI CEC, IR/UHF RC input



## Antik Smart Home Systems

## **COMFORT and SAFETY for your customer experience**

Create difference to your telco products and add state-of-art smarthome features to your multiplay offers. From remote control of lighting, heating/AC and home devices, home security to control over your power and other resources consumption. Set your typical usage profile and your home is set to holiday mode in a second. Want to be prepared for your winter unexpected home arrival? Activate heating and lights on the access road from your app. Want to see how is your home power consumption in comparison with similar families – check it directly on ANTIK TV screen. Live monitoring of your very important places, movement tracking, temperature sensor, water and gas leakage and more...security component of ANTIK Smart Home solution.

End-to-End SmartHome System integrated to ANTIK IPTV products – set-top boxes and TV smart apps. No need of expensive extra control unit at home – all is included in ANTIK TV user interface.

## **Antik** Energy Monitor

## **Home Energy Costs Under Control**

With simple inexpensive power consumption sensors wirelessly connected to ANTIK STBs (using ANTIK Smart Home USB dongle) you can easily control how much it costs and more - compare it with the average neighbour to see how efficient you are! All in one ANTIK Energy Monitor.



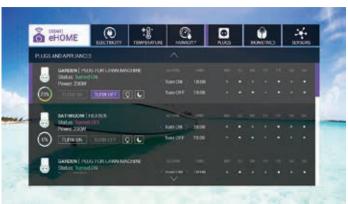


## Antik Wall Plug

#### Remote control of electric appliances and consumption scanning

Localize appliances with too high energy consuption and replace them with more economic model. Summarize the overall consumption of the household and plan more reasonable system. Control the appliances remotely to feel comfortable about your place.





## **Smart Home**

## **Antik** LED Bulb

#### Make sure the lights are on when you need them

Never enter a dark room again! Turn the lights on while heading home, so you feel safer. Or turn the lights off when you're not at home to conserve energy. Plus control your appliances so you never have to worry that you left the curling iron on. Set your own at home/work/night/holiday profiles remotely to feel comfortable about your place.





## Antik Biometric Scale

## **Healthy lifestyle support**

Maintaining optimal weight has never been easy. ANTIK Biometric scale was developed and designed to help simplifying this process. Reveal the strenghts and weaknesses of your lifestyle directly from your body structure analysis and get the tips to support your balanced lifestyle directly from your Antik TV.





## **Antik** Gas Detector

#### Stay safe from fire and floods

Smoke, fire, water and gas leakage detectors can be connected to the system easily. Rest easy knowing you are constantly monitored for emergencies like leaks or flooding in your laundry room.



## Antik Smart Display

All information targeting household displayed just in time on one screen which is reacting to gestures.



## Antik Mobile Apps

## Versatile Video Delivery to iOS, Android and Windows 8

Watch TV on mobile or tablet. Give your customers access to their TV channels anywhere. Customers only need to install this Antik Media application and they will be able to choose Live TV streams or Radios based on HLS or they can select favorite program from TV Archive. Application is supporting H.264 format and is fully compatible with Antik Media Streamer, where you can manage your own local or global content delivery. All is secured with Key Rider DRM scrambling solution which is designed for higher security of IPTV network.



#### **Key Features**



#### Live stream TV

Customers can enjoy Live TV broadcasting anywhere just with smartphone or tablet where they have internet connection.



#### **EPG**

Program guide with user friendly environment.



#### **TV Archive**

Access to the programs also after their live broadcast ended. User will just simply choose TV station, day and select his favorite program, which he missed.



## **Watching Bookmarks**

Start to watch movie from archive on TV and finish on mobile or tablet (coming soon).



#### Live stream Radio

Users can listen radio stations also in this application and enjoy music on the road through the phone or tablet. Customer doesn't need to download any other additional radio applications.



#### **STB Remote Control**

Easy control of STB directly from mobile/tablet same as using classic RC (coming soon).

# ANTIK Hospitality IPTV



- Effective x-sell tool for hotel marketing
- Impressive presentation of hotel services with sale opportunities

## Top-level entertainment for your guests

- Crystal clear HD TV channels
- All guest services on TV screen
- Hotel bill, Food ordering, Messages and more
- On-demand movies

- Content Management System
- Internet apps + Mediaplayer
- Quick setup
- In-room WiFi

## End-To-End IPTV for your property

# High-Definition 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 fulfiling highest guest expectations.



#### 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 DLNA mediaplayer 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.

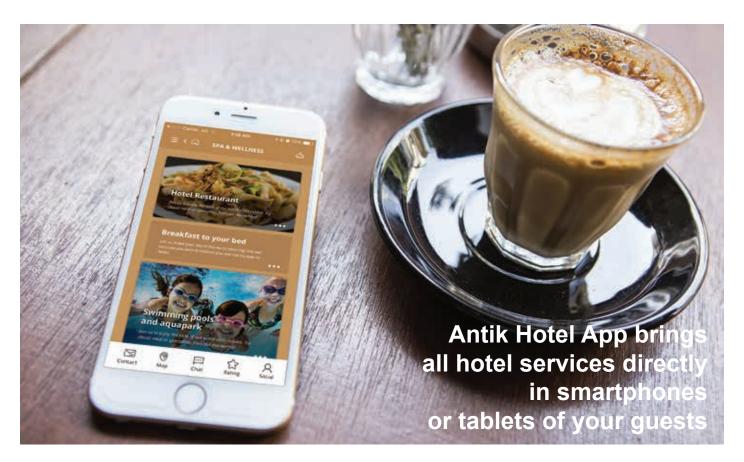


# **Content Management System and Integration**

Feature-rich CMS allows the hotel to bring all new guest offers and services to the TV screens instantly – without expensive technical support or development – from new room service options, through special promotions to 3rd party offers. Thanks to unified reception user interface nothing is easier than to add or remove menus, submenus and specific items, all ready within minutes to give you enough time to spend time with your guests not with technology.



# **ANTIK** Hotel App



- 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

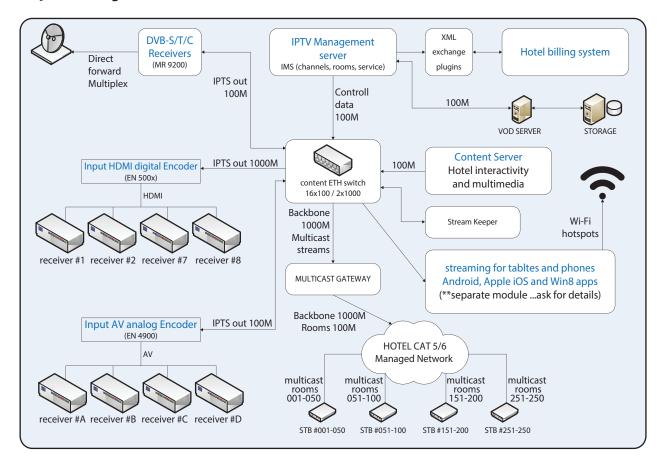
No posters, no brochures. Communicate with your guests immediately.

#### **Build long-term relationship**

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



## Hospitality IPTV network infrastructure



# Digital Signage

## Antik Digital Signage Solution

## Comprehensive Multimedia Advertising Delivery System







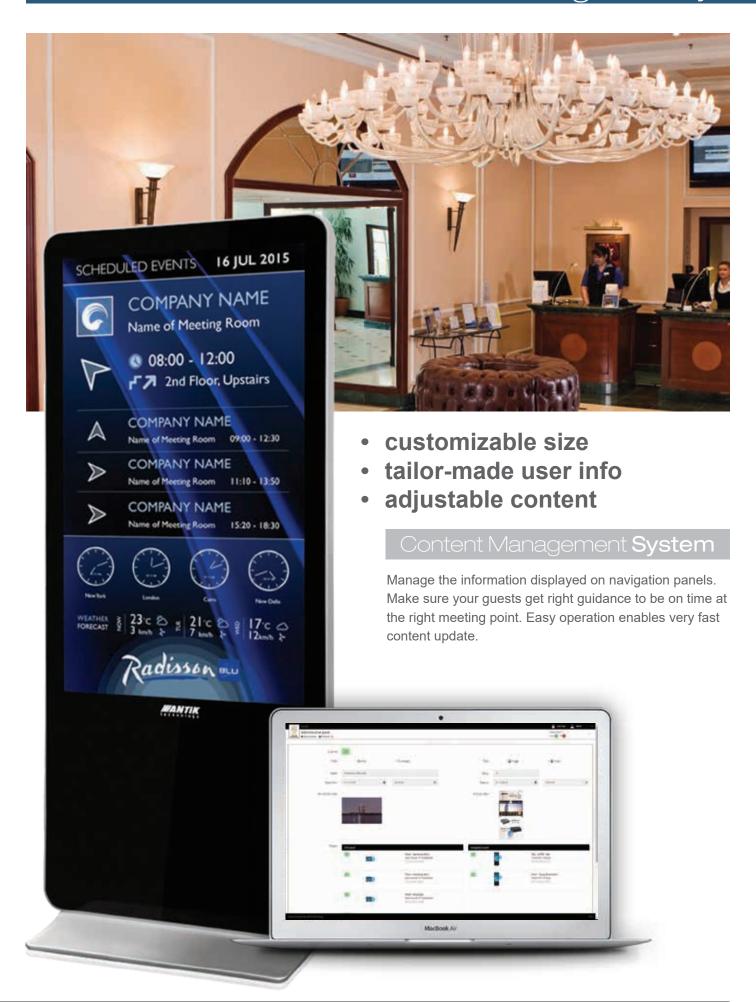
## Kev Features

- 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. 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 settop 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).

# **ANTIK** Event navigation syster



# 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.

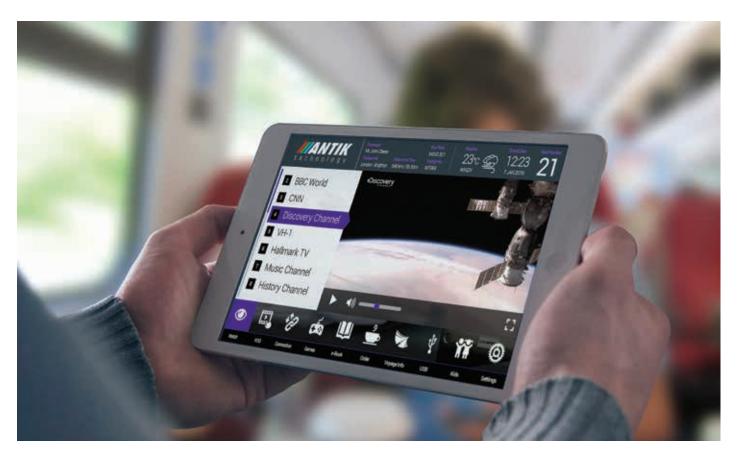


## INFORMATION & ENTERTAINMENT





# **BYOD** - Bring Your Own Device



#### **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

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

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