Arantia INSPIRING A DIGITAL WORLD

Arantia — INSPIRING A DIGITAL WORLD

Contents

ARANTIA IS
THE IPTV TELEVES CORPORATION COMPANY

Arantia is the Televes Group company specializing in IP Television (IPTV), and a wide variety of services that can be offered using the IP protocol.
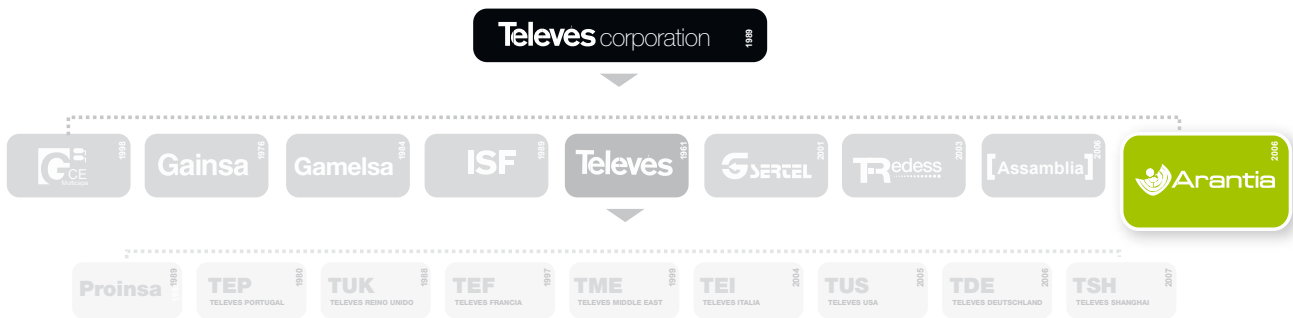
We provide global solutions to organizations through technology with the flexibility of designing and manufacturing all elements of our own solution for interactive TV and IPTV.

We offer a wide range of advanced solutions and services covering the entire value chain in different sectors, from the initial stages of consulting and design through project development and integration of technology solutions, implementation, manufacture and post-operative management.

Innovation is one of the fundamental pillars in our development strategy, devoting significant resources and investments to research and the development of new technologies and services.

We create technology to lead the convergence of digital television, Internet, and access to on demand contentinteractive services through research and development of new applications, products and services and audio-visual multimedia IP technology.

With the warranty of belonging to a business group supported by over 50 years experience in the telecommunications market.

Televes corporation 1988

CE	Gainsa	Gamelsa	ISF	Televes	SERTEL	TRedess	[Assamblia]	Arantia

| Proinsa | TEP | TUK | TEF | TME | TEI | TUS | TDE | TSH |
| | TELEVES PORTUGAL | TELEVES REINO UNIDO | TELEVES FRANCIA | TELEVES MIDDLE EAST | TELEVES ITALIA | TELEVES USA | TELEVES DEUTSCHLAND | TELEVES SHANGHAI |

The globe is our market.
Televes corporation is present in almost 100 countries, either directly through subsidiaries, or through an extense network of professional distributors.

Televes corporation has played a vital role and leadership in the transition process from analog to digital television in Europe.

Arantia is expanding the experience gained in our native Spain to other European and Global markets going through the same process.

Welcome to a world where nothing is impossible, where the union between digital technology and advanced services produces unimaginable results. Where one single device allows you to be in contact with the world via multiple channels, and where projects become reality. We invite you to discover our world. The digital world of Arantia.

1. ARANTIA WHAT WE DO

ARANTIA develops new applications and systems which are changing how television is understood.

We can distinguish three basic pillars which leads us to be a company with high innovation and adaptation capacity to the demanding requirements of today's market:

• Design and manufacture of hardware

• Software Development

Ease of implementation and adaptation to the needs of the client.

Design and manufacture of hardware:

Due to the most modern manufacturing technologies on the market, we have the tools necessary to create 100% in-house products, maintaining a high standard of reliability and control. All this combined with a strong international presence through Televes subsidiaries offers a high degree of reliance and customer support.

Our industry experience has enabled us to carry out the development of devices specifically tailored to the specific needs of our customers.

Arantia's capacity to manufacture in-house product is an advantage to approach a project with greater assurance.

Software Development

Arantia also develops the necessary software to support its solutions from the firmware of hardware devices, such as IPTV headends and STBs, to the software of other equipment like the middleware, providing its users with a new experience of entertainment through television.
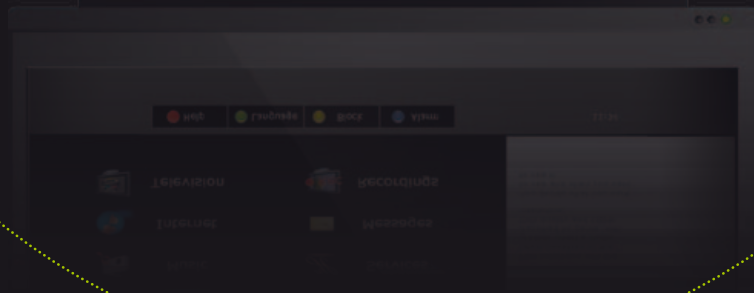
arantia.tv

1. ARANTIA TV
THE GLOBAL END TO END IPTV SERVICE DELIVERY PLATFORM

ARANTIA develops new applications and systems which are changing how television is understood.

Arantia has created a global end to end IPTV platform that enables to distribute live, scheduled and on-demand contents and services over any type of network and in any device (TV, PC, mobile phone). Arantia IP platform is totally scalable and personalized to the broadcast and cable operators' requirements and specific projects.

An open platform, scalable and customizable according to the needs of each project:

- Open architecture designed in order to facilitate the deployment of new IPTV services and the applications' management and operation tasks.

- Modular and scalable architecture in number of devices, users and services.

- Flexibility to deal with different scenarios and business models.

- Totally personalized and adaptable user interface.

BENEFITS
ARANTIA offers a new world of possibilities for operators, corporations and projects through the deployment of new IP services, allowing in this way:

- Increase the offer of added value services as a new source of revenue.

- Increase the users' satisfaction.

- Easy deployment of live, scheduled and on-demand services and contents in a single platform.

- Facilitates the deployment of new interactive services.

- Total integration in a single, easy to use, user interface of all of the potentially demanded applications.

Arantia offers a global end-to-end IPTV service delivery platform for the deployment of interactive services in private networks of medium and large size, offering users all sorts of services that are accessible both locally and remotely via television and PC.

the answer to your needs
Triple play services

OPERATORS. Arantia solutions offer the highest scalability, reliability and flexibility, giving operators an ideal platform for the deployment of IPTV services in any type of device on any network.

HOSPITALITY. Arantia offers a new entertainment, information and communications experience to hotels, hospitals, cruise ships and all kinds of building projects, integrating technology, equipment, contents and services to offer a new digital experience to users.

CORPORATE. The IP world offers new tools to improve efficiency in corporate environments through the deployment of an IPTV service platform that allows people to exchange and distribute all kind of multi-media contents and services locally or remotely.

SPECIFIC SECTORS. Our experience in the implementation of telecommunications infrastructures in residential and non-residential construction allows us to offer significant added value to other sectors as transport, stadiums and other singular buildings.

IPTV HEADEND

Supports the reception from different input signals (DVB-T, DVB-C, DVB-S/S2, IP and ASI), descrambling, rescrambling and remultiplexing, thus allowing services to be added for distribution and streaming across the IP network in an efficient manner.

ENCODING-TRANSCODING

This set of systems makes the adaptation of content to allow its distribution in any type of device (PC, TV, mobile) and in any type of IP network.

INGEST AND CATALOGUING

This system allows the content's acquisition from different sources, making possible the creation of a digital media library for the storage and the cataloguing of all desired contents.

STORAGE

Storage of different formats and qualities for each content allowing the fitting to the different medias, including, among others, MPEG2, H264 and AVC.

IPTV MIDDLEWARE

One of the core systems of the IPTV service delivery platform. Manages the generation of interfaces and services to each user on the network, enabling integration with external systems.

VOD SERVERS

Equipment responsible for generating on-demand video streams to those users who request access to the available contents on the platform.

SCHEDULING

The information shown on each screen can be updated in real time or alternatively sequences may be programmed in advanced.

DIGITAL SIGNAGE MIDDLEWARE

This server allows the management of the contents and services to be shown on each digital signage view point, to be controlled in a centralized manner.

ADMINISTRATION AND MANAGEMENT SYSTEMS

Set of systems that facilitate the administrator to manage all elements of hardware and software necessary for the deployment of advanced services over IP networks.

TV USER   **DS TV USER**

STB   **STB**

INTERNAL NETWORK

PC USER   **PC USER**

2. A SOLUTION FOR EVERY NEED

We have sought inspiration from viewers to create a new interactive digital TV platform. This is a perfect combination of exclusive design and state-of-the-art techno-logy, giving the TV viewer a new and meaningful experience.

You will relax while you are informed and entertained. Arantia TV will transport you to a major digital movie theater where you will laugh, cry and experience a whole new world of sensations.

Arantia TV includes all the services needed to respond to its customers' requirements within a single IPTV platform in all kinds of projects, including hotels, hospitals, operators, companies and residential buildings, providing additional new tools to enhance business operations.

IPTV A NEW WAY OF WATCHING TV

Arantia TV means a new TV viewing mode with the user deciding what he wants to see and when he wants to see it, thanks to a combination of direct services and channels, scheduled services and on-demand based totally interactive services (VOD).

- A global solution for digital services.
- Installation with any available wiring system (coaxial, utp, phone line).
- Compatible with any type of tv set.
- Incredibly easy to use.
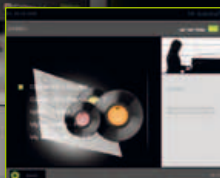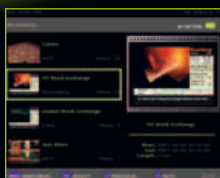- Totally customizable.

VIDEO ON-DEMAND

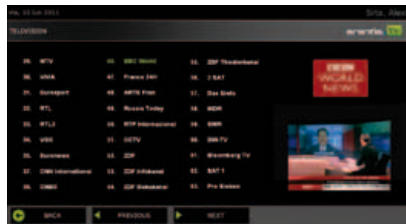INTERACTIVE SERVICES

MUSIC

INTERNET ACCES

PVR

IP TELEVISION

3. A NEW DIGITAL ENTERTAINMENT EXPERIENCE

WELCOME

It allow you to address to your clients directly by means of a customised welcome message with a personalised picture and music.

DTT AND SATELLITE CHANNELS ON IP

It provides a major customized DTT and satellite channel offer on IP, giving new options for selection, TV grid access and total integration with all digital entertainment services on the platform in a single user interface.
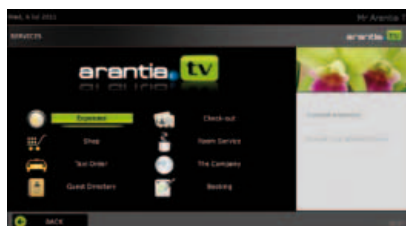

PVR

Programs recording for any available TV channel, presented with information and related data: description, channel, start, finish, duration and number of viewings.
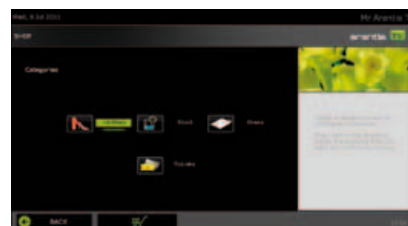

INTERNET

It enables TV Internet basic access to websites or Email.

INTERNAL SERVICES

This presents the services the hotel offers for your enjoyment without need for you to leave your guestroom: shop, room
service, wakeup call, express check-out, invoice consultation, booking zfacilities…

INTERNAL SHOP

Internal shop of the establishment. Manage your purchases directly from the TV. Allows to print orders in a network printer and sends e-mail alerts to the person in charge of the service
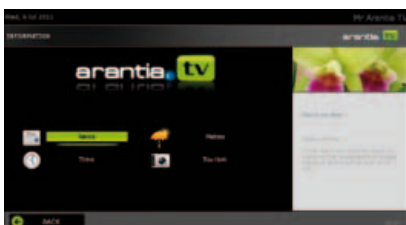
INFORMATION

highly customizable menu which includes various sections of infor-mation addressed to your customers, as news or weather information.

NEWS

Online access to news and information channels. Get an update on daily news from the major domestic and international newspapers.
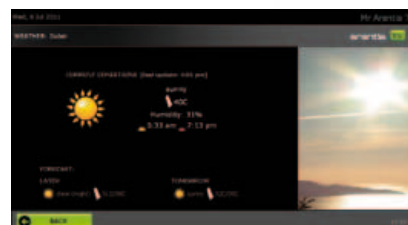
WEATHER INFO

Provides information about the weather in your city and other 5 to choose, as well as the forecast for the next day.
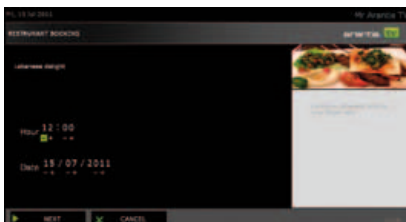
CORPORATE CHANNEL

Offers corporate users an own TV channel for promoting inhouse services that is totally and dynamically updatable.
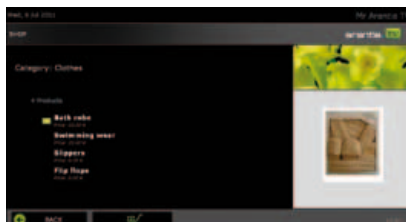
PROMOTION AND ADVERTISING

This offers a new user communication tool for sending promotional and publicity messages in different formats.
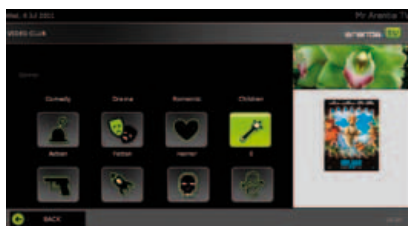
VIDEO CLUB

It includes a film catalog
including the latest novelties from top studios,
classified by genre. With DVD quality and 100%
interactive, enabling you to pause and resume
viewing at any moment.The user decides what to
see and when to see it.
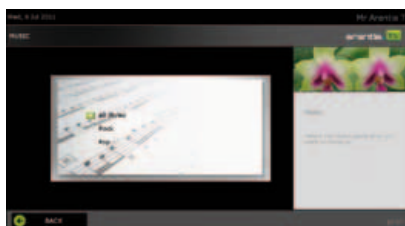
MUSIC

This offers a selection of TV playable musical
contents, classified by genre.

MESSAGING

On-screen access to messages received from
the hotel reception desk. This system will
be used to notify you of any information you
receive, as well as answer to your questions
and requests and any promotions that may be
of interest to you...
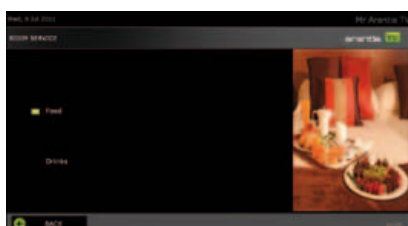
RESTAURANT AND ROOM SERVICE

These services provide a restaurant service
as well as order management through the
television. Allows to print orders in a network
printer and sends e-mail alerts to the person in
charge of the service.
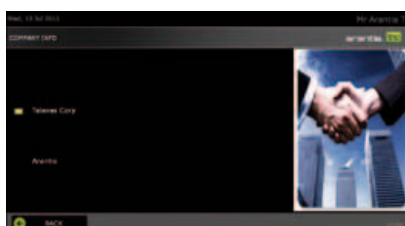
## COMPANY INFO

Promotional section where you can upload text,
picture or pdf files with information about your
company.

GUEST DIRECTORY

Create a directory of the services offered by your
establish-ment in alphabetical order.

4. COMMUNITY PORTALS

Arantia offers a global end-to-end IPTV service delivery platform for the deployment of interactive services in private networks of medium and large size, offering users all sorts of services that are accessible both locally and remotely via television or PC.

Connect your community with a new communication services for a *luxury*

world of digital entertainment and
lifestyle

A NEW PLATFORM FOR THE DEPLOYMENT OF VALUE-ADDED SERVICES INCLUDING:

1. A wide range of personalized value-added services that encompass everything necessary to offer to the end users a luxury lifestyle.

2. A global platform which integrates services to end users, retailers and system administrators accessible via the TV or PC.

3. A technological solution that includes all the hardware and software needed to deploy the services in the community portal.

4. A technological solution that guarantees access to services both locally and remotely, together with cross-device access, whether through your television set, your computer, your PDA, mobile phone, tablet PC or other communication devices.

5. A stable, reliable and safe technological architecture, which guarantees the scala-bility and portability to different environments.

6. User friendly interfaces.

5. TECHNOLOGICAL ARCHITECTURE: COMPATIBLE WITH ANY NETWORK

Arantia TV can easily be integrated into your existing installation, as well as buildings and other facilities that are being restructured. This is made possible thanks to the flexibility of use of different types of infrastructure and distribution networks for transporting IP signals to different user points of use. Thus it is possible to use the coaxial or UTP network or a telephone line to deploy interactive or VOD services.

SAT

DTT

ANALOG

IPTV HEADEND

IP DISTRIBUTION NETWORK

STB USER

PC USER

STB USER

VOD SERVER

MIDDLEWARE

NETWORK MANAGEMENT SYSTEM

MIDDLEWARE
Totally open and scalable equipment for final system user service and interface distribution, offering different options with basic and advanced services.

NETWORK MANAGEMENT SYSTEM
A tool that enables the remote monitoring of all network devices, including the video distribution platform (VOD), middleware and STBs, including remote opera-ting facilities to resolve incidences and update versions.

VOD SERVER
High capacity on-demand video distribution platform with own robust scalable technology and with the ability to distribute MPEG2 and MPEG4 video services in different installation topologies.

ADMINISTRATION TOOLS
A tool enabling access to the system administrators, to manage different applications and services, including invoicing consultations, messaging, price changing and service descriptions, among others.

5. HD-IPTV SET-TOP BOX 2010
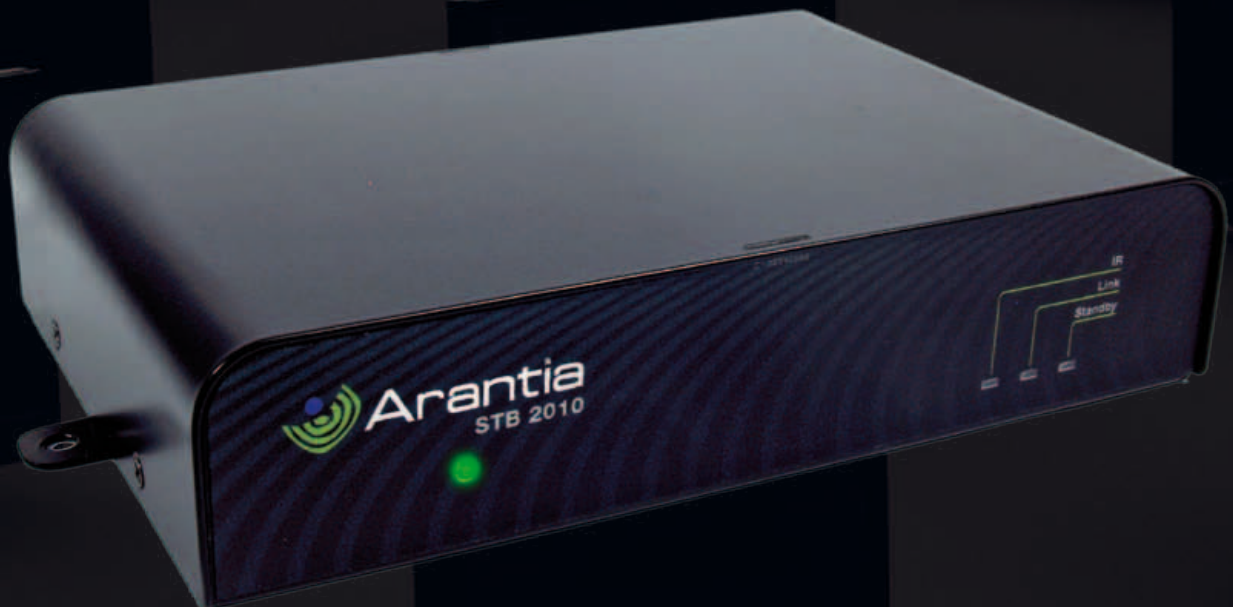
TURN KEY END TO END SERVICE DELIVERY PLATFORM

WITHIN ARANTIA END TO END IPTV SERVICE DELIVERY PLATFORM, FROM THE DIGITAL HEAD END TO THE STB, THIS IPTV MPEG 4 AVC STB ENSURES THE DEPLOYMENT OF TRIPLE PLAY SERVICES.

KEY FEATURES

- **MPEG 2 and MPEG** 4 AVC / H264 platform.
- **High Definition** up to 720p and 1080i.
- **Advanced user interface navigation** via embedded browser.
- **HDMI interface** with HDCP copy protection.
- **Multiple Ethernet** interface.
- **USB 2.0 high speed** communication port.
- **TV Interface (TVI) and IR extension.**
- **Remote configuration** and management.
- **Based on open standards to facilitate rapid application** development.
- **Modular system architecture ready for the evolution of features and services.**

FEATURES

SYSTEM

- 266 Mhz RISC Processor
- 128 MB DDR System
- 64 MB DDR Video
- 64 MB Flash

PROTOCOLS

- IPTV Multicast (IGMP v2/v3)
- VoD (RTSP) - TrickMode
- VoD (HTTP) - TrickMode
- HTML 4.01
- HTML 5 (PARTIAL)
- XHTML 1.0
- CSS 3, CSS 2
- DOM level 2
- SVG
- Javascript 1.5 (ECMAScript 262 Edition 3)
- XML, XMLHttpRequest (AJAX, Web 2.0 support)
- HTTP y HTTPS
- DHCP/TFTP

VIDEO DECODING

- MPEG-2 MP@ML (ISO 13818-2): up to 15 Mbps
- MPEG-2 MP@HL (ISO 13818-2): up to 25 Mbps
- MPEG-4 H.264 MP@L4.1 (ISO 14496-10): up to 25 Mbps
- MPEG-4 H.264 HP@L4.1 (ISO 14496-10): up to 25Mbps
- VC-1 AP@L3: up to 25 Mbps
- VC-1 MP@HL : up to 20 Mbps
- Resolution: 1080i, 720p, 480p,576i
- Aspect Ratio: 4:3, 16:9 with Pan & Scan, Letterbox
- PiG

AUDIO DECODING

- MPEG-1 Layer 1: up to 448 kbps, 32/44.1/48 kHz
- MPEG-1 Layer 2: up to 384 kbps, 32/44.1/48 kHz
- MPEG-1 Layer 3 (MP3): up to 320 kbps, 32/44.1/48 kHz
- Dolby AC-3
- AAC LC (ISO/IEC 14496-3)
- DolbyDigital+

OPERATING SYSTEM, MIDDLEWARE AND APPLICATIONS

- LINUX Kernel 2.6
- ARANTIA IPTV Stack & IPTV Javascript API
- ARANTIATV Middleware
- ARANTIA loader
- ARANTIA browser (Webkit-based)
- Device & Network Configuration HTML application
- Remote management application
- Arantia Mini EPG
- TVI
- Key-protected, scalable multicast software upgrade

CONNECTIVITY

- 2 x Ethernet 10/100 Mbit Rear Panel
- 2 x USB 2.0

BACK PANEL

- 2xUSB 2.0 Host
- 2xRJ45 (Ethernet 10/100)
- 1xHDMI (HDCP compliant)
- 1x 2,5 jack (CVBS/LR Audio) (Macrovision compliant)
- 1x IR extension
- 1x S/PDIF (digital audio)
- 1x DC Power jack (12V/1,5A)

FRONT PANEL

- Netlink Status LED
- Standby LED
- IR reception LED
- IR Receiver

GENERAL DATA

- Teletext: DVB EN 300 472
- TVI
- Certifications: EMC, Safety
- External power supply
- Operating Voltage: 230 V AC
- Operating temperature range: +5 to +40 (ºC)
- Casing Size (WxDxH) : 204 x 114 x 40 mm

5. HD-IPTV SET-TOP BOX CHRONOS

THE STB CHRONOS IS AN ADVANCED, INTERACTIVE, DIGITAL HIGH DEFINITION SET-TOP BOX DESIGNED TO RECEIVE IP SERVICES

ALONG WITH THE ABILITY TO DEVELOP   INTERACTIVE APPLICATIONS AND SERVICES ON ITS INTEGRATED BROWSER.

TURN KEY END TO END SERVICE DELIVERY PLATFORM
WITHIN ARANTIA END TO END IPTV SERVICE DELIVERY PLATFORM, FROM THE DIGITAL HEAD END TO THE STB, THIS IPTV MPEG 4 AVC STB ENSURES THE DEPLOYMENT OF TRIPLE PLAY SERVICES.

KEY FEATURES

- MPEG 2 and MPEG 4 AVC / H264 hybrid plataform.
- High Definition up to 1080p60
- Advanced user interface navigation via embedded browser.
- HDMI interface with HDCP copy protection.
- USB 2.0 high speed communication port.
- TV Interface (TVI) and IR extender.
- Remote configuration and management.
- Based on open standards to facilitate rapid application development.
- Modular system architecture ready for the features and services evolution.
- State-of-the-art web-browser with a versatile JavaScript API
- Ecodesigned STB with very low power consumption (<3W)
- DRM supported- Verimatrix.

FEATURES

SYSTEM

Multicore Processor
- Host CPU MIPS@700Mz
- Secure CPU MIPS@350Mhz

512 MB DDR2 Memory
512 MB NAND Flash Memory
Dual HD video decoder
JPEG hardware acceleration
32-bit OSD
2D graphics acceleration

PROTOCOLS

IPTV Multicast (IGMP v2/v3)
HTTP 1.1
HTTPS
Video over UDP
Video over RTSP
Audio over MP3
HLS (HTTP Live Streaming)
HTML 5.0
XHTML 1.1
CE-HTML
Dynamic HTML
CSS 3, CSS 2, CSS TV
DOM 1.0 / 2.0
XML 1.1
JSON
JavaScript 1.8
XMLH9pRequest
AJAX
Frames and I-Frames support
Plugins: Adobre Flash plugin 10.1

VIDEO DECODING

MPEG-1
MPEG-2 MP@HL
MPEG-4.2 ASP@L5 (up to HD resolu on, 1-point GMC)
SMPTE 421M (VC-1) MP@HL and AP@L3
MPEG-4.10 (H.264) MP@L4.0 and HP@L4.0.
H.261
AVS
In-loop de-blocking filter for MPEG-4.10 (H.264) and
SMPTE 421M (VC-1)
Error concealment for MPEG-2 and MPEG-4.2
Elementary video stream bit rate:
MPEG-4.2 SDTV (HDTV): 20 (40) Mbps maximum
MPEG-4.10 (H.264) SDTV (HDTV): 20 (40) Mbps maximum
WMV9/SMPTE 421M (VC-1) SDTV (HDTV): 20 (40) Mbps maximum
MPEG-2 SDTV (HDTV): 20 (40) Mbps maximum

AUDIO DECODING

Dolby Digital 5.1, Dolby Digital Plus 7.1, Dolby TrueHD 7.1, Dolby Pro Logic IIx 5.1 (supports movie, music, matrix, Dolby Pro Logic emulation, Dolby Digital EX,
virtual compatible, and panorama modes)
MPEG-1 Layers I, II and III (MP3) 2.0
MPEG-4 AAC-LC 5.1
MPEG-4 HE-AAC 5.1
DTS
FLAC
OGG vorbis
ADPCM DVI
QT
G.711 (A-law and μ-law)

OPERATING SYSTEM, MIDDLEWARE AND APPLICATIONS

- LINUX Kernel 2.6
- ARANTIA IPTV Stack & IPTV Javascript API
- ARANTIATV Middleware
- ARANTIA loader
- ARANTIA browser (Webkit-based)
- Device & Network Configuration HTML application
- Remote management application
- Arantia Mini EPG
- TVI
- Key-protected, scalable multicast software upgrade

CONNECTIVITY

- 1 x Ethernet 10/100 Mbit Rear Panel
- 2 x USB 2.0

BACK PANEL

1xDC Power Jack (12V/1,5A)
Reset Button
S/PDIF audio output
IR extender
USB 2.0 Host connector
HDMI (HDCP compliant)
RJ45 10/100/1000 Ethernet with ac vity&link

FRONT PANEL

IR receiver
USB 2.0 Host connector
Standby Led indicator

GENERAL DATA

Certifications:
Low Voltage Directive 2006 / 95 / EC
EMC Direc ve 2004 / 108 / EC
Casing Size (WxDxH) : 115.4 x 86.6 x 33 mm
Consumption:
Stand by <= 1W
Operating (maximum) 3W

SOWARE STACK

LINUX Kernel 2.6.293
Aran a Browser (QtWebkit based)

5. IPTV COMPACT HEADEND

THE IPTV-HE10 HEADEND ALLOWS THE RECEPTION OF DIGITAL SERVICES THROUGH ITS INPUT MODULES DVB-T, DVB-S/S2, DVB-C, ASI AND A/V, FOR SUBSEQUENT ENCAPSULATION INTO IP PACKETS
AND STREAMING OVER AN IP NETWORK.

28
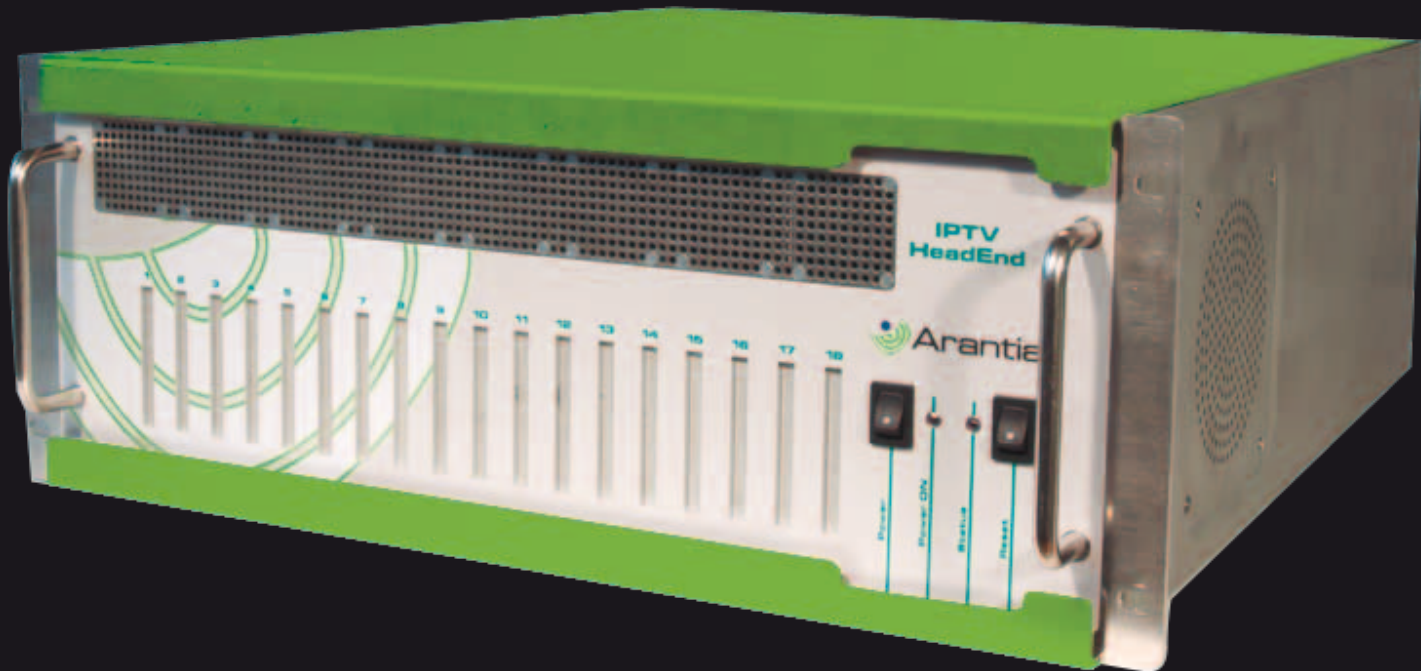
THE IPTV-HE10 SUPPORTS FREE-TO-AIR CHANNELS AND PAY SERVICES THROUGH THE DVB COMMON INTERFACE ASSOCIATED TO EACH ENTRY.

THE IPTV-HE10 SUPPORTS ALL THE FORMATS USED IN OUR INDUSTRY:
MPEG-2 SD / HD, MPEG-4 SD / HD (H.264), MP3, AAC, DD + ...

FEATURES

CHASSIS

The main features of the chassis are:

Modular configuration with up to 18 positions for cards

Web-based system configuration

Forced air-cooling

GENERAL

19" rack ready, 4RU

HxWxD: 177x480x555mm

Input voltage: 115-230 Vac, 50/60Hz

Operating temperature: 0 C – 45 C

Storage temperature: -10 C – 60 C

Humidity: 10% - 90% (non-condensing)

Power consumption: 300W

INPUT MODULES

Input modules are: DVB-T input, DVB-S input, DVB-S/S2 input, DVB-C input, ASI input, A/V input.

DVB-T INPUT:

1 COFDM input

IEC female connector

Input frequency range: 48-855 MHz

Carrier mode: 2K, 8K

Modulation: QPSK, 16QAM, 64QAM

Guard interval: 1/4, 1/8, 1/16, 1/32

FEC Rate 1/2, 2/3, 3/4, 5/6, 7/8

FEC Reed Solomon & Viterbi

Support reception for SPTS and MPTS

Service filtering

DVB-S INPUT:

1 DVB-S input

Modulation: QPSK, BPSK

F female connector

Input frequency range: 950-2150 MHz

Symbol rate range: 1-45 Ms/s

LNB power feed

FEC Rate 1/2, 2/3, 3/4, 5/6, 7/8

Support reception for SPTS and MPTS

Service filtering

DVB-S/S2 INPUT:

1 DVB-S/S2 input

Modulation: QPSK, 8PSK, 4 + 12 APSK

F female connector

Input frequency range: 950-2150 MHz

Symbol rate range: 1-45 Ms/s

LNB power feed

FEC Rate 1/2, 2/3, 3/4, 5/6, 7/8, 8/9, 9/10

Support reception for SPTS and MPTS

Service filtering

DVB-C INPUT:

1 DVB-C input

Modulation: QAM 16, 32, 64, 128, 256

IEC female connector

Input frequency range: 48-855 MHz

Symbol rate range: 0.87-8.7 Ms/s

Support reception for SPTS and MPTS

Service filtering

ASI INPUT:

1 DVB-ASI input

BNC connector

Data rate: 213 Mbps

Support reception for SPTS and MPTS

Service filtering

A/V INPUT

Video signal: PAL-I/CVBS

Audio signal: PAL-I/Stereo

Video connector: IEC female connector/RCA female

Audio connector: 2x RCA female

Maximum video resolution: 720x576

Video encoding: MPEG-2 MP@ML VBR MAX=8000 Kbps

Audio encoding: Layer 2 CBR 224 Kbps Stereo 48.0 KHz

ETHERNET OUTPUT MODULE:

The main features of the Ethernet output module are:

2x 10/100/1000BaseT (RJ45) (Management + Streaming)

Support for UDP/RTP Multicast/Unicast Ipv4/IPv6 transmission

Spport for SPTS

Data rate streaming up to 500 Mbit/s

Transport stream, MPEG-2 SD/HD, MPEG-4 SD/HD, AAC, DD+ ...

PIDs filtering

EPG Pass-through of EIT, SDT and TDT tables

SAP announcements

5. IPTV HEADEND

The ARANTIA IPH-2010 headend is the most efficient solution on the market for the reception and streaming of IPTV channels, allowing Operators, Hotels, Corporations, administrative buildings and custom projects to distribute advanced IPTV and Digital TV services with maximum quality and reliability.

The IPH-2010 headend is the ideal solution for TV broadcasters, irregardless of their size, migrating to an IP distribution over ADSL/VDSL, FTTH or Cable. It also allows analogical and digital channels to be broadcast simultaneously, permitting the distribution of IP channels over the trunk network, and improving efficiency in the use of bandwidth.

It integrates all of the functions in one box, permitting the selection of multiple inputs and outputs, including a wide range of input, descrambling, rescrambling and remultiplexing interfaces, thus allowing services to be added for distribution across all kinds of networks in an efficient manner.

Content Agregation.
Configured as a high-density receiver, IPH-2010 allows services from different sources to be integrated, including IP, DVB-S/S2, DVB-C and DVB-T, with outputs in ASI or IP, among others.

Simulcast for Operators.
Eliminates the need to distribute analogical channels over the core network. The RF modules support A2 and NICAM stereo options, allowing local insertions with great flexibility.

Demodulation and Monitoring.
Decodes the signal with video and balanced stereo audio outputs, permitting monitoring in local studios and rebroadcasting.

Digital Modulation for Cable Operators.
May be equipped with QAM outputs for the distribution of services over the network, combining analogical and digital channels in a single platform and a single user interface.

Central Headend.
The flexible configuration of the system allows you to add services from different sources and prepare these for distribution over cable networks.

Remote Headend.
With IP, ASI, DVB-C or DVB-T inputs and QAM high density outputs, operators can distribute all of the services in a single common platform.

Contribution.
ASI high transfer rate systems, remultiplexing functions and ease-of-use mean that services can be adjusted as required.

Local Insertion.
Allows channels to be inserted with ease, given the versatility and flexibility of the headend configuration.

Descrambling.
Permits the descrambling of multiple services, thus maximising the use of the system and the design of the solution.

Scrambling.
Compatible with most CA on the market which support the AES and DVB CSA algorithms.

FEATURES

- 4RU chassis.
- Gbit/s IP (electrical or optical), ASI, DVB-S/ S2, DVB-T and DVB-C inputs.
- Any combination of inputs in the same chassis. Maximum:
    - 45 ASI.
    - 28 DVB-S/S2, DVB-T, DVB-C.
- Gbit/s IP (electrical or optical), ASI and QAM outputs supporting MPTS and SPTS.
- Multiplexing.
- PSI/SI regeneration.
- PSI/SI/PSIP input analysis.
- Up to 28 DVB common interface slots for DVB descrambling.
- Support for AES SW descrambling.
- Support DVB and AES scrambling, simulcrypt interface based.
- Intuitive web-based user control.
- Dual redundant hot-swap power supplies.
- SNMP Alarm MIB.
- SOAP/XML Interface for external control.
- MPEG-2 4:2:0 MP@ML decoding.
- Composite PAL and analogue stereo audio output.
- NICAM or A2 stereo support.
- VBI reinsertion.
- EBU/DVB subtitling.
- FM radio with RDS insertion.

IPTV HEADEND: APPLICATION

DIGITAL HEAD-END

FTTH

ROUTER

ASI

IP

IP CORE

xDSL

DSLAM

COAX CABLE
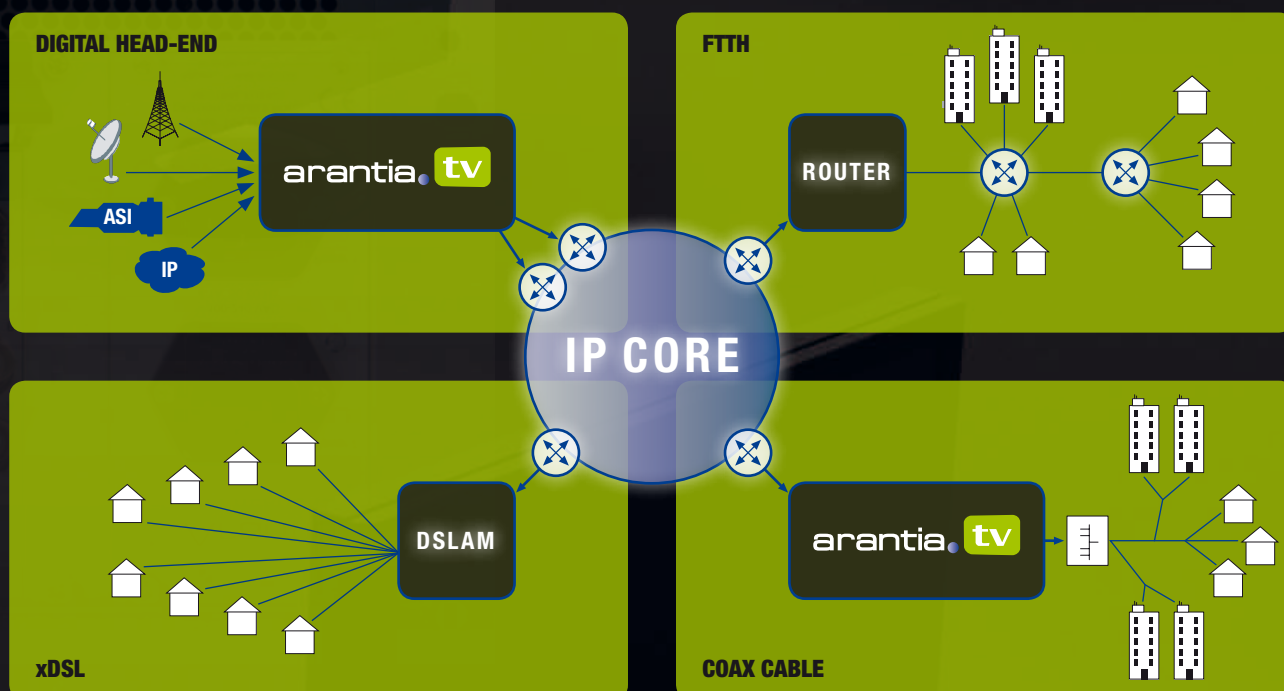
IPTV HEADEND: CHASSIS
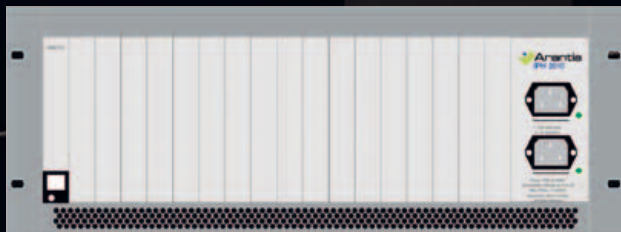
Chassis
Product code:
Chassis Simple (Z0106001)
Chassis Dual Power (Z0106002)
- Modular configuration with up to 16+2 board positions.
- WEB based configuration, SNMP Alarms, SOAP/XML interface.
- Hot-swappable modules.
- Dual redundant hot-swappable 300 W power supply.
- 4 individually monitored hot-swappable fans.

IPTV HEADEND: SWITCH MODULE

Switch Module
Product code: Z0106004
- Gbit/s routing between modules in a chassis.
- 1 slot wide (switch module must be placed in slot 0. Redundant module in slot 17)

IPTV HEADEND: PROCESSING MODULES

1. Descrambler
Product code: Z0106012
- 2xDVB Common interface.
- Descrambling up to 10 services per CAM (depends on common interface).
- Support for all major CA systems and CAMS.
- 1 slot wide.

2. Scrambling
Product codes:
DVB Scrambler 75 Services: Z0106013
DVB Scrambler 150 Services: Z0106014
DVB Scrambler 250 Services: Z0106015
AES Scrambler 75 Services: Z0106016
AES Scrambler 150 Services: Z0106017
AES Scrambler 250 Services: Z0106018
- DVB CA compliant scrambling (CSA) and AES compliant scrambling.
- Scrambles up to 250 services, maximum 850 Mbit/s.
- Supports partial scrambling and PVR.
- Support scrambling of MPEG-2 and H264 in SD & HD.
- DVB Simulcrypt compliant.
- 10/100/1000 BaseT IP interface towards CA system (RJ45).
- Handles up to 250 ECM's.
- 1 slot wide.

IPTV HEADEND: INPUT MODULES

1. Ethernet Input w/Management
Product code: Z0106005
- 10/100/1000 BaseT input card (RJ45).
- Mini-GBIC interface (SFP) for optical input.
- Supports UDP/RTP Multicast/Unicast reception.
- Supports reception of MPTS and SPTS.
- Service filtering.
- PCR regeneration.
- 10/100/1000 BaseT management port (RJ45).
- Enables WEB management.
- 1 slot wide.

2. ASI Input w/Management
Product code: Z0106006
- 3xASI input.
- BNC connectors.
- 213 Mbit/s per input.
- Supports reception of MPTS and SPTS.
- Service filtering.
- 10/100/1000 BaseT management port (RJ45).
- Enables WEB management.
- 1 slot wide.

3. DVB-S/S2 Input w/Management
DVB-S product code: Z0106007
DVB-S2 product code: Z0106008
- 4xDVB-S/S2 inputs.
- F connectors.
- DVB-S, DVB-S2 QPSK and 8PSK modes.
- 950 – 2150 MHz Frequency Range.
- 1-45 MSym/s (mode dependent).
- 1/2, 2/3, 3/4, 5/6, 7/8, 8/9, 9/10 FEC (mode dependent).
- Supports reception of MPTS and SPTS.
- Service filtering.
- ASI monitoring port.
- 10/100/1000 BaseT management port (RJ45).
- Enables WEB management.
- 2 slots wide.

4. DVB-T Input w/Management
Product code: Z0106010
- 4xCOFDM inputs.
- F connector.
- 1/2, 2/3, 3/4, 5/6, 7/8 FEC.
- 2k and 8k carrier mode.
- QPSK, 16QAM, 64QAM modulation.
- Supports reception of MPTS and SPTS.
- Service filtering.
- ASI monitoring port.
- 10/100/1000 BaseT management port (RJ45).
- Enables WEB management.
- 2 slots wide.

5. DVB-C Input w/Management
Product code: Z0106011
- 4xQAM inputs.
- F connector.
- 0.87-6.9 Ms/s.
- Supports reception of MPTS and SPTS.
- Service filtering.
- ASI monitoring port.
- 10/100/1000 BaseT management port (RJ45).
- Enables WEB management.
- 2 slots wide.

IPTV HEADEND: OUTPUT MODULES

1. Decoder w/ Composite video and analogue audio
Product code: Z0106019
- 2 decoders per module.
- MPEG-2 DVB 4:2:0 MP@ML decoding.
- VBI re-insertion (WSS, WST/EBU, VPS, Teletext Subtitling, VITS).
- DVB and teletext subtitling.
- AES descrambling (option).
- Composite PAL Video output – BNC connectors.
- Balanced Stereo Audio output – D-sub connector.
- 1 slot wide.

2. Decoder w/ Composite video, analogue audio and Common Interface
Product code: Z0106020
- 2 decoders per module
- MPEG-2 DVB 4:2:0 MP@ML decoding
- VBI re-insertion (WSS, WST/EBU Teletext, VPS, VITS)
- DVB and EBU subtitling
- AES descrambling (option)
- 2 DVB Common Interfaces. One per channel
- Composite PAL Video output – BNC connectors
- Balanced Stereo Audio output – Five poles XLR connectors
- 2 slots wide

3. Ethernet Output
Product code: Z0106021
- 10/100/1000 BaseT input card (RJ45).
- Mini-GBIC interface (SFP) for optical input.
- Supports UDP/RTP Multicast/Unicast transmission.
- Supports multiple output cards.
- Streaming of up to 850 Mbit/s.
- Maximum 250 service per output card.
- Supports streaming of SPTS.
- Supports streaming of MPTS with Multiplexing (optional).
- PSI/SI regeneration.
- PCR regeneration.
- 1 slot wide.

4. ASI Output
Product code: Z0106022
- 4xASI outputs.
- BNC connectors.
- 213 Mbit/s per output.
- 4 Different multiplexed outputs.
- PSI/SI regeneration.
- 1 slot wide.

5. QAM Output
Product code: Z0106023
- 8 QAM outputs, 4 and 4 paired.
- Full digital modulation and up-conversion.
- DOCSIS 3.0 RF compliant.
- 32 / 64 / 128 / 256 QAM modulation.
- Frequency range of 50 – 850 MHz.
- Supports multiplexing and transparent pass through.
- PSI/SI regeneration.
- F connector for RF output.
- External mute of RF output.
- 2 slots wide.

IPTV HEADEND: INPUT INTERFACE SPECIFICATIONS

IP INPUT
Interface: 10/100/1000 Base-T Ethernet and SFP
Maximum data rate: Up to 850 MBit/s
Data format: UDP Multicast/Unicast, RTP
Transport stream: SPTS and MPTS
PCR de-jittering: Yes

ASI INPUT (EN 50083-9)
Connector: BNC female, 75Ω
Number of inputs per module: 3
Maximum bit-rate per port: Up to 213.7Mbit/s
Management: 10/100/1000 Base-T Ethernet

DVB-S/S2 INPUT (EN 300 421, EN 302 307)
Connector: F female, 75Ω
Number of inputs per module: 4
Decoding: LDPC and BCH
Symbol rate DVB-S: 1-45 MSym/s
Symbol rate DVB-S2: 5–30 MSym/s
FEC DVB-S: 1/2, 2/3, 3/4, 5/6, 7/8
FEC DVB-S2 QPSK: 1/2, 3/5, 2/3, 3/4, 4/5, 5/6, 8/9, 9/10
FEC DVB-S2 8PSK: 3/5, 2/3, 3/4, 5/6, 8/9, 9/10
DVB-S2 FEC frames: Normal frames
Input level: -25 to -70 dBm
Frequency range: 950-2150 MHz
LNB voltage: 0/13/18 Volt
Maximum LNB supply current: 400 mA
LNB signaling: LNB voltage + 22kHz continuous tone
Management: 10/100/1000 Base-T Ethernet

DVB-T INPUT (EN 300 744)
Connector: F female, 75Ω
Number of inputs per module: 4 demodulators (one connector)
Input level: -20 to -65 dBm
Frequency range: 49 – 861 MHz (center frequency)
Channel bandwidth: 7 and 8 MHz (6 MHz optional)
Guard interval: 1/4, 1/8, 1/16, 1/32
Carrier mode: 2k, 8k
Hierarchy stream: High and low priority
Hierarchy mode: All
Carrier modulation: QPSK, 16QAM, 64QAM
FEC rate: 1/2. 2/3, 3/4, 5/6, 7/8
FEC: Reed Solomon & Viterb Fully compliant with ETS 300 744 and NorDig 2 specifications
Spectrum: Non-inverted and inverted
Management: 10/100/1000 Base-T Ethernet

DVB-C INPUT (EN 300 429)
Connector: F female, 75Ω
Number of inputs per module: 4 demodulators (one connector)
Frequency range: 51 – 858 MHz (center frequency)
Channel bandwidth: 7 and 8 MHz (6 MHz optional)
QAM Mode: 4, 16, 32, 64, 128, 256 QAM
Symbol rate: 0.87-6.9 Mbaud
FEC: ITU-T J83 annex A, B and C And ETS 300 429
Spectrum: Non-inverted and inverted
Management: 10/100/1000 Base-T Ethernet

IPTV HEADEND: DESCRAMBLING SPECIFICATIONS

DVB DESCRAMBLING
Interface: DVB Common Interface
CA system support*: BetaCrypt, Conax, Cryptoworks, Irdeto, Mediaguard, Viaccess, NDS Viasat, Nagra.
Number of services per CAM: 10 (requires multi service CAM)

AES DESCRAMBLING
Interface: Virtual smartcard
CA system support**: Please contact Arantia

* Arantia aim to integrate with all major CA providers. Please contact Arantia for an updated list over integrated CA systems. ** Before ordering AES descrambling, please contact Arantia.

IPTV HEADEND: SCRAMBLING SPECIFICATIONS

SCRAMBLING

Scrambling algorithm: DVB-CA and AES
Maximum data rate: Up to 850 MBit/s
Number of services per scrambler card: 250 (depending on SW license)
Video format: Transport stream, MPEG-2 SD/HD and MPEG-4 SD/HD
Scrambling mode: Supports partial scrambling and PVR*

CA INTERFACE

Interface towards CA System: Simulcrypt interface
Number of CA systems: 4 simultaneously CA systems
EMM: Yes
Entropy reduction: Yes for DVB / No for AES

* PVR functionality supported will depend on integration with CA provider. Please contact Arantia for more information.

IPTV HEADEND: PROCESSING SPECIFICATIONS

PSI/SI

Function: PSI/SI input analysis, regeneration based on input and operations performed on the signal.
Pass-through of scrambled services: Yes, on TS level. For SPTS output only
PSI/SI handling: Automatically regenerated
Tables supported: PAT, PMT, CAT, SDT, NIT, EIT p/f, TDT, TOT

PSIP

Function: PSIP input analysis
Tables supported: PAT, PMT, MGT, VCT, EIT, ETT, STT

MULTIPLEXING

Supported on: ASI output (standard) and IP output (option)
Video format: Transport stream, MPEG-2 SD/HD and MPEG-4 SD/HD

IPTV HEADEND: DECODER INTERFACE SPECIFICATIONS

DECODING

Decoding of MPEG-2 MP@ML Video (max. bit rate 15Mbits/s). The following resolutions shall be supported (Note: For 525 line resolutions, please contact Arantia):

525 lines: 720~480 / 704~480 / 544~480 / 480~480 / 352~480 / 352~240
625 lines: 720~576 / 704~576 / 544~576 / 480~576 / 352~576 / 352~288

The video format is interpreted from the video PES headend. 4:3 and 16:9 video is supported.

DVB SUBTITLING

DVB subtitling according to: EN300 743 v1.2.1

VBI PROCESSING:

Wide screen signaling (WSS) according to:
Input: EN 301 775 v1.2.1 — *Output:* ETS 300 294
World standard teletext (WST/EBU):
Input: EN 301 775 v1.2.1 — *Output:* ITU-R BT.653-3 (System B only)
Video programming system (VPS):
Input: EN 301 775 v1.2.1 — *Output:* ETS 300 231
Teletext subtitling (OSD): Supported
VITS (Video Inserted Test Signals): ITU-T J.63 for 625 lines Sin(x)/x on line 319 or 335
Closed captioning: Supported in later release

VIDEO OUTPUT:

Video standards: PAL* and SECAM L
Connector: BNC female, 75Ω
Luminance non-linearity (measured on ramp): < 2%
Chrominance/luminance gain error: < 3%
Chrominance/luminance delay error: < 37.5ns
Chrominance subcarriers: +/- 2kHz
Chrominance burst Level: 300mV +/-5%
Differential gain: <2%
Differential phase: <1deg
SECAM identification: Line ID
2T K factor: <1%
Signal to noise ratio: >54dB weighted
Group delay (0.0 to 5.0MHz): +/-40ns
Parameters specific to 625 line video:
Frequency response:
• *0.0 to 5.0MHz:* +/-0.5dB
• *0.0 to 5.5MHz:* +0.5dB/–1.5dB
• *5.5 to 5.8MHz:* +0.5dB/-3dB
Video output level (700mV): +/-3%
Synchronisation level (300mV): +/-3%
Parameters specific to 525 line video:
Frequency response:
• *0.0 to 4.2MHz:* +/-0.5dB
• *4.2 to 4.5MHz:* +/-0.5dB/-1.5dB
Video output level: +/-3 IRE
Line synchronisation level: +/- 1.5IRE

* For a list on implemented PAL standards, please contact Arantia.

AUDIO OUTPUT

Number of stereo outputs per video: 1
Decoding of the following formats is supported: MPEG-1 layers 1 and 2 (Musicam), MPEG-2 layer 2
Bit-rates: 32kbps to 384kbps
Sampling rates: 32kHz, 44.1kHz and 48kHz
Connector: Mini-XLR or D-SUB (depends on module)
Output format: Balanced
Lip synch: Assumed correct in TS
Output level: 0dBu in 10 kΩ
Output level adjustment: -10dB to +6dB, step size 0.5dB
Output Impedance: <50Ω
Frequency response:
fs=44.1 or 48kHz • +/- 0.5dB (20Hz to 20kHz)
fs=32kHz • +/-0.5dB (20Hz to 14.5kHz)
THD+N at +9dB: <-63dB (20Hz – 20kHz)
IMD at 9.95 – 10.05kHz 0dB: <-50dB
Inter channel phase: <3º
Idle Channel Noise (DAC active): <-74dB

IPTV HEADEND: OUTPUT SPECIFICATIONS

IP OUTPUT
Interface: 10/100/1000 Base-T Ethernet output and SFP interface
Maximum data rate: Up to 850 MBit/s
Maximum number of services: 250
Data format: UDP Multicast/Unicast, RTP
Video format: Transport stream, MPEG-2 SD/HD and MPEG-4 SD/HD
PCR regeneration: Yes, According to EN50083_9
Multiplexing: Yes (Option)

ASI OUTPUT
Connectors: 4 BNC female, 75Ω
Number of outputs per module: 4 Different Transport Streams
Maximum bit-rate per port:
• Up to 213 Mbit/s Burst mode
• Up to 72 Mbit/s Spread mode
Transport stream output: SPTS and MPTS
Number of services per card: 250 (sum of all 4 ports)
Output format: Constant bit-rate
PCR regeneration: Yes, According to EN50083_9
Multiplexing: Yes, per port

QAM OUTPUT
Interface: F connector female, 75Ω
Number of QAM frequencies per module: 8 Different MPTS according to EN 300 429
Number of services per card: 250 services (sum of all 8 ports)
Multiplexing: Yes, per port
Transparent pass-through: Yes, per port
Modulation: 32 / 64 / 128 / 256 - QAM
Symbol rate: 4,48 to 7.00 Mbaud
Frequency range: 50 – 850 MHz
Frequency step size: 12,5 kHz
Frequency Stability: 5 ppm
Output level with 8 carriers on: 100 to 110 dBµV per carrier
Output level adjustment step size (GUI): 0,5 dB
PCR regeneration: Yes, According to EN50083_9

IPTV HEADEND: VIDEO & AUDIO MONITORING

VIDEO OUTPUT
Connector: BNC female, 75Ohm
Output format: PAL and SECAM
Decoding: MPEG-2 MP@ML (max. bit rate 15Mbits/s)
VBI Insertion: Teletext (WST/EBU), WSS, VPS, VITS
Subtitling: DVB and EBU

AUDIO OUTPUT
Number of stereo outputs per video: 1
Connector: Mini-XLR or D-SUB (depends on module)
Decoding of the following formats is supported:
MPEG-1 layers 1 and 2 (Musicam)
MPEG-2 layer

IPTV HEADEND: ENVIRONMENTAL SPECIFICATIONS

CONDITIONS
Operational temperature: 0°C to +40°C
Operational humidity: 0% to 95% (non-condensing)
Storage temperature: -20°C to +70°C
Storage humidity: 5% to 95% (non-condensing)

POWER
Power: Input voltage 110V/240V, 50/60 Hz
Power supply rating: 300W each, T250V 5A fuse
Number of power supplies: 1 or optionally 2
Control: Power supplies are monitored from GUI and via LEDs on chassis.
Mounting Hot-swappable, mounted on opposite side of input/output Modules.
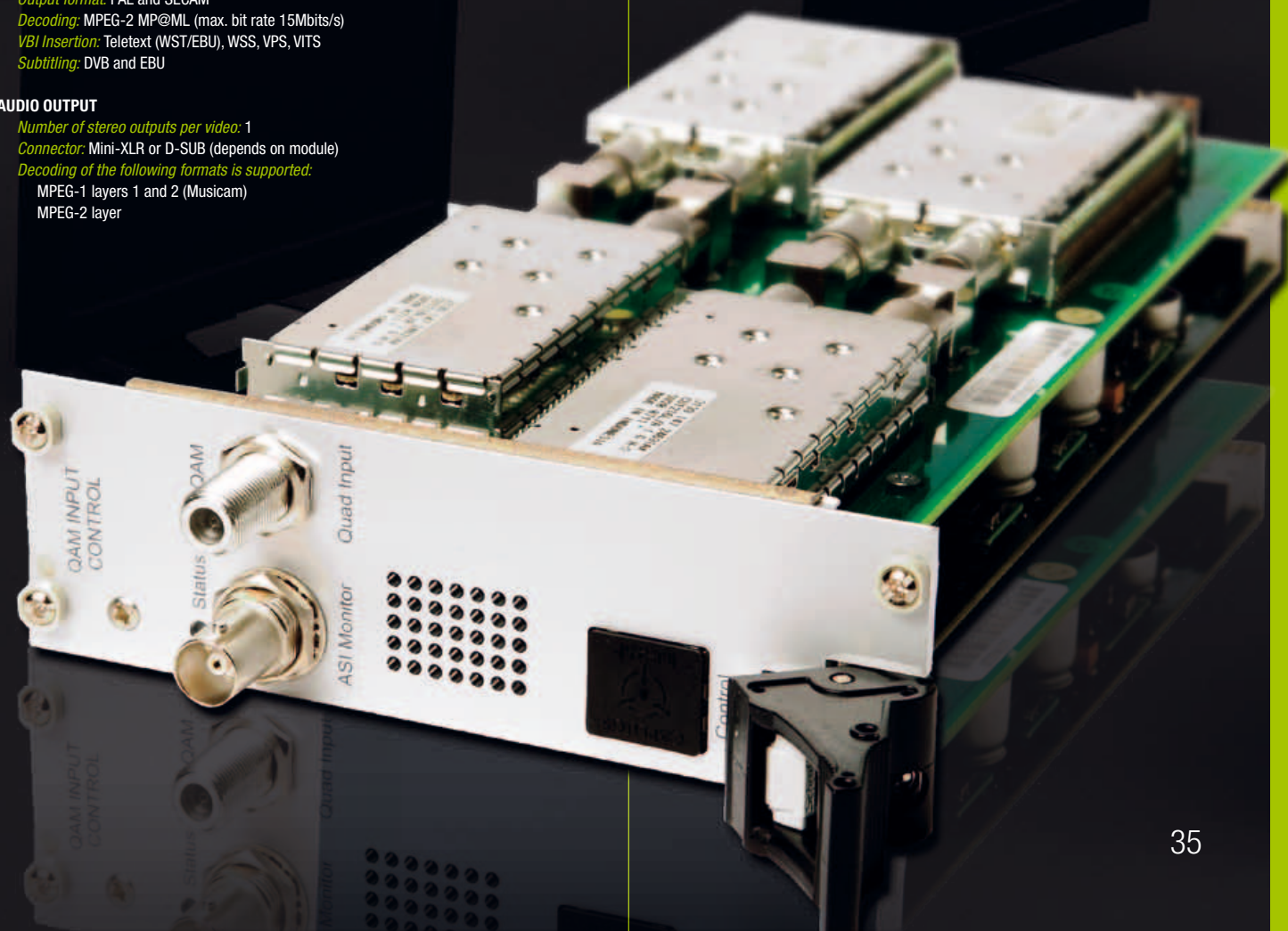
FANS
Cooling: Hot-swappable fans (airflow front-to-back)
Number of fans: 4
Control: Fans are monitored from GUI and via LEDs on chassis

PHYSICAL
Dimensions: 19" x 4RU
Mounting options: Telco – cable in front Broadcast style – cable in back

NOTE: SPECIFICATIONS AND PRODUCT AVAILABILITY ARE SUBJECT TO CHANGE WITHOUT NOTICE.

5. IPTV MIDDLEWARE.

MIDDLEWARE & MANAGEMENT SYSTEM

The Arantia Middleware Server is responsible for distributing the services to the STB, through a complete but easy to use interface. This interface is customizable depending on the requirements of the client.

IPTV

Through this Web based middleware, the final user can access to the IPTV channels.

SOLUTIONS

A Management Application is provided to enable the system administrator manage the available services: modify the TV channels and radio stations available on the network, enable or disable the TV channels and radio stations for each user.

830301	IPTV MIDDLEWARE HW & ONE SITE LICENSE, 50 USERS
830302	IPTV MIDDLEWARE HW & ONE SITE LICENSE, 150 USERS
830303	IPTV MIDDLEWARE HW & ONE SITE LICENSE, 300 USERS
830304	IPTV MIDDLEWARE HW & ONE SITE LICENSE, 500 USERS
830305	IPTV MIDDLEWARE HW & ONE SITE LICENSE, 750 USERS

FEATURES

SERVICE

IPTV Distribution of digital terrestrial, digital satellite and analogical television channels in IP.

Avaible upgrade to interactive Services.

MANAGEMENT APPLICATION

All the services provided can be managed through the Management Application.

Format	Web Application

PERFORMANCE

Processor	CPU INTEL Core i3 2100 3.1 GHZ
System Bus	1600/1333/1066 MHz
Chipset	Intel® Z68 Express Chipset
Memory	1 x 2 GB DDR3 1066 MHz DIMM
Internal storage	1000GB
Hard drives	2 x HD 500 GB SATA2 7200 rpm
Power Supply Standard	600W power supply
Network interface card	1 internal and 2 network cards

LAN SUPPORT

Mother Board	Realtekl® 81111E Gigabit LAN Controller (10/100/1000 Mbits/sec)
PCI	2 x Gigabit 32b Network Card (10/100/1000 Mbits/sec)

A/V

Video	Multi-VGA output support: HDMI and DVI-D, RGB port.
	Support LucidLogix® Virtu-Universal Swichable Graphics Solution.
Audio	Realtek® ALC887 8-channel High Definition Audio CODEC.

EXPANDABILITY

Hard drives	Intel® Z68 Express Chipset:
	- 4x Serial ATA 3.0 Gb/s connectors
	- 2 x Serial ATA 6.0 Gb/s connectors
	- Intel® Rapid Storage Technology supports RAID 0,1,5 and 10
	- Support Intel® Smart Response Technology in Windows Vista/7
Expansion Capabilities	2 x PCI Express 2.0 x 16 slots
	2 x PCI Express 2.2 x 1 slot
	3 x PCI slots
	* The PCIe x 16_2 slot shares bandwidth with PCIe x 1_1 slot, PCIe x 1_2 slot
Expansion Slots	7 PCI slots
USB 2.0 Ports	6
IEEE-1394a interface	4 x DIMMs, max. 32GB, DDR 3
	2200(O.C) / 2133(O.C)/1866(O.C)/1600/133/1066 MHZ, non-ECC,un-buffered memory

CHASSIS

Form factor	4U rack-mount
Height	17,30 cm
Width	48,30 cm
Depth	52 cm
Weight	Maximum weight of 15.1kg
Rack support	4-post sliding rails; 2-Post rails

PORTS

Rear	1 x PS/2 keyboard/mouse combo port
	1 x Optical S/PDIF out port
	1 x HDMI port
	1 x DVI port
	1 x RGB port
	1 x LAN (RJ45) port
	2 x USB 3.0/2.0 ports
	4 x USB 2.0/1.1 ports
	8-channel audio I/O ports

ENVIRONMENTAL

Operating Temperature	10º C to 35º C (50º F to 95º F)
Operating Relative Humidity	20% to 80% non-condensing
Operating Vibration	0.26Grms at 5Hz to 350Hz for 2 minutes
Operating Shock	1 shock pulse of 41G for up to 2ms
Operating Altitude	-16 to 3,048m (-50 ft to 10,000 ft)
Storage Temperature	-40º C to 65º C (-40º F to 149º F)
Storage Relative Humidity	5% to 95% non-condensing (twmax=38C)
Storage Vibration	1.54Grms Random Vibration at 10Hz to 250Hz for 15 minutes
Storage Shock	6 shock pulses of 71G for up to 2ms
Storage Altitude	-16m to 10,600m (-50 ft to 35,000 ft)
Maximum Humidity Gradient	10% per hour, operational and
non-operational conditions	

* additional hardware required

5. ITV MIDDLEWARE.

MIDDLEWARE & MANAGEMENT SYSTEM

The Arantia Middleware Server is responsible for distributing the services to the STB, through a complete but easy to use interface. This interface is customizable depending on the requirements of the client.

ITV

Through this Web based middleware, the final user can access to all the services provided: he can have access to VOD contents, he can listen to music, read the latest news, receive and send messages to another users of the sytem, netsurfing through the Internet on the TV, access to promotion information, send suggestions to the administrator of the system, buy some products from the on-line shop provided or make a reservation.

SERVICES

Video club, music, internet, news, mailbox and internal services.

SOLUTIONS

A Management Application is provided to enable the system administrator manage all the services available, change the information that appears on the system, upload music to the server, get information of use and other statistical information, like related to the number of views of each VOD content on the system, modify the TV channels available on the network, enable or disable the TV channels and the VOD content for each user, get information about the end user client.

The operations made by the user through the Middleware interface are integrated with the most common and important PMS.

830306	ITV MIDDLEWARE HW & ONE SITE LICENSE, 50 USERS
830307	ITV MIDDLEWARE HW & ONE SITE LICENSE, 150 USERS
830308	ITV MIDDLEWARE HW & ONE SITE LICENSE, 300 USERS
830309	ITV MIDDLEWARE HW & ONE SITE LICENSE, 500 USERS
830310	ITV MIDDLEWARE HW & ONE SITE LICENSE, 750 USERS

FEATURES

SERVICES

Video Club*	Film catalogue with the latest releases and contents from the top studios classified in various genres.
Music	Selection of music contents classified in various genres.
Internet	Access to predefined links and netsurfing on the TV.
News	Access to on-line news and information channels.
Mailbox	Messages sending and reception through the TV.
Internal Services	Services catalogue totally configurable according to the installation's needs.
IPTV	Distribution of digital terrestrial, digital satellite and analogical television channels in IP.
Recordings*	PVR functionalities.
Radio	Distribution of radio channels in IP.

MANAGEMENT APPLICATION

Format	Web Application.
Management	All the services provided can be managed through the Management Application.

EXTERNAL INTERFACES

PMS	Fidelio, Opera, WINHOTEL, Prestige, and others.

PERFORMANCE

Processor	CPU INTEL Core2Duo E6400 2.13 GHZ
System Bus	1066/800/533 MHz
Chipset	Intel® G965 Express Chipset
Memory	2 x 1 GB DDR2 800 MHz SDRAM
Internal storage	640GB
Hard drives	2 x HD 320 GB SATA2 7200 rpm
Power Supply	Standard 600W power supply; Auto-switching universal 90-264V
Network interface card	1 internal and 2 network cards

LAN SUPPORT

Mother Board	Gigabit (10/100/1000 Mbits/sec) LAN subsystem using the Intel® 82566DC Gigabit Ethernet Controller
PCI	2 x Gigabit 32b Network Card

A/V

Video	Intel® Graphics Media Accelerator X3000 onboard graphics subsystem
Audio	8-channel (7.1) audio subsystem using the SigmaTel STAC9271D audio codec and Dolby Home Theater certification

EXPANDABILITY

Drive bays	1 x slimline bay: 24x IDE CD-RW/DVD Combo Drive
Hard drives	Up to 6 SATA IDE Interfaces and x 2 HD 320 GB SATA2 7200 rpm and one Parallel ATA IDE interface with UDMA 33, ATA-66/100/133 support
Expansion Capabilities	One PCI Express x16 bus add-in card connector Three PCI Express x16 bus add-in card connector Three PCI Conventional bus connectors
Expansion Slots	7 PCI slots
USB 2.0 Ports	4
IEEE-1394a interface	2 x 1 GB DDR2 800 MHz SDRAM
Serial port	1
Parallel port	1

CHASSIS

Form factor	4U rack-mount
Height	17,30 cm
Width	48,30 cm
Depth	53,30 cm
Weight	Maximum weight of 15.1kg
Rack support	4-post sliding rails; 2-Post rails

PORTS

Rear	2 x USB 2.0 ports, 1 x video connector, 1 x serial connector, 1 x IEEE-1394a
Front	2 x USB 2.0 ports, 1 x video connector, 1 x IEEE-1394a

ENVIRONMENTAL

Operating Temperature	10º C to 35º C (50º F to 95º F)
Operating Relative Humidity	20% to 80% non-condensing
Operating Vibration	0.26Grms at 5Hz to 350Hz for 2 minutes
Operating Shock	1 shock pulse of 41G for up to 2ms
Operating Altitude	-16 to 3,048m (-50 ft to 10,000 ft)
Storage Temperature	-40º C to 65º C (-40º F to 149º F)
Storage Relative Humidity	5% to 95% non-condensing (twmax=38C)
Storage Vibration	1.54Grms Random Vibration at 10Hz to 250Hz for 15 minutes
Storage Shock	6 shock pulses of 71G for up to 2ms
Storage Altitude	-16m to 10,600m (-50 ft to 35,000 ft)
Maximum Humidity Gradient	10% per hour, operational and non-operational conditions

* additional hardware required

5. VOD SERVER 20 STREAMS.

VOD SERVER

The Arantia VOD Server is a flexible, scalable and reliable device that enables the ingesting of video streams into the network, providing applications such as Video on-demand, Personal Video Recording or Corporate Contents on Demand. Specially designed for small-size projects.

IPTV & ITV

Thanks to its scalability, a cluster of Arantia VOD Servers enables to get any Distribution Platform for Video on-demand gauged according to the network's characteristics and number of users. The load balancing among a cluster of Arantia VOD servers and also the failure of one of them is managed by our VOD Management Application, that controls all the servers by itself and enables to reallocate a VOD session in another server if the actual one fails, to recover VOD sessions if there is a problem with the power supply for a long period of time, and so on.

SOLUTIONS

The key features of this server are the multiple video formats (SD and HD), the capability of streaming and recording, the scalability, the functionalities of VOD applications, Personal Video Recording or Corporate Contents on Demand and the low power consumption.

FEATURES

MEDIA

Media File Formats:	MPEG2 and H.264 Transport Stream
	H.264/MPEG-4 AVC
	MPEG-4 Part 2

STREAMING PROTOCOLS

Transport	HTTP 1.1
	RTSP/RTP
	MPEG TS over UDP
Control	RTSP

STREAMING

Number of streams	20 streams @ 5 Mb/s

TRICK MODE

Supported for	MPEG-2 and H.264
Fast-forward and rewind speeds	2x, 4x, 8x, 16x, 32x, 40x

PERFORMANCE

Processor	CPU INTEL Core i3 2100 3.1 GHZ
System Bus	1600/1333/1066 MHz
Chipset	Intel® Z68 Express Chipset
Memory	1 x 2 GB DDR3 1066 MHz DIMM
Internal storage	1000GB
Hard drives	2 x HD 500 GB SATA2 7200 rpm
Power Supply Standard	600W power supply
Network interface card	1 internal and 2 network cards

LAN SUPPORT

Mother Board	Realtekl® 81111E Gigabit LAN Controller (10/100/1000 Mbits/sec)
PCI	2 x Gigabit 32b Network Card (10/100/1000 Mbits/sec)

A/V

Video	Multi-VGA output support: HDMI and DVI-D, RGB port.
	Support LucidLogix® Virtu-Universal Swichable Graphics Solution.
Audio	Realtek® ALC887 8-channel High Definition Audio CODEC.

EXPANDABILITY

Hard drives	Intel® Z68 Express Chipset:
	- 4x Serial ATA 3.0 Gb/s connectors
	- 2 x Serial ATA 6.0 Gb/s connectors
	- Intel® Rapid Storage Technology supports RAID 0,1,5 and 10
	- Support Intel® Smart Response Techology in Windows Vista/7
Expansion Capabilities	2 x PCI Express 2.0 x 16 slots
	2 x PCI Express 2.2 x 1 slot
	3 x PCI slots
	* The PCIe x 16_2 slot shares bandwidth with PCIe x 1_1 slot, PCIe x 1_2 slot
Expansion Slots	7 PCI slots
USB 2.0 Ports	6
IEEE-1394a interface	4 x DIMMs, max. 32GB, DDR 3
	2200(O.C) / 2133(O.C)/1866(O.C)/1600/133/1066 MHZ, non-ECC,un-buffered memory

CHASSIS

Form factor	4U rack-mount
Height	17,30 cm
Width	48,30 cm
Depth	52 cm
Weight	Maximum weight of 15.1kg
Rack support	4-post sliding rails; 2-Post rails

PORTS

Rear	1 x PS/2 keyboard/mouse combo port
	1 x Optical S/PDIF out port
	1 x HDMI port
	1 x DVI port
	1 x RGB port
	1 x LAN (RJ45) port
	2 x USB 3.0/2.0 ports
	4 x USB 2.0/1.1 ports
	8-channel audio I/O ports

ENVIRONMENTAL

Operating Temperature	10º C to 35º C (50º F to 95º F)
Operating Relative Humidity	20% to 80% non-condensing
Operating Vibration	0.26Grms at 5Hz to 350Hz for 2 minutes
Operating Shock	1 shock pulse of 41G for up to 2ms
Operating Altitude	-16 to 3,048m (-50 ft to 10,000 ft)
Storage Temperature	-40º C to 65º C (-40º F to 149º F)
Storage Relative Humidity	5% to 95% non-condensing (twmax=38C)
Storage Vibration	1.54Grms Random Vibration at 10Hz to 250Hz for 15 minutes
Storage Shock	6 shock pulses of 71G for up to 2ms
Storage Altitude	-16m to 10,600m (-50 ft to 35,000 ft)
Maximum Humidity Gradient	10% per hour, operational and non-operational conditions

5. VOD SERVER 95 STREAMS.

VOD SERVER

The Arantia VOD Server is a high-performance, flexible, scalable and reliable device that enables the ingesting of video streams into the network, providing applications such as Video on-demand, Personal Video Recording and Corporate Contents on Demand. Specifically designed for medium and large size projects.

IPTV & ITV

Thanks to its scalability, a cluster of Arantia VOD Servers enables to get any Distribution Platform for Video on-demand gauged according to the network's characteristics and number of users.

SOLUTIONS

Featuring quad-core processor, this 4U rack server, provides the best performance and lower consumption for distributed cluster environments. The load balancing among a cluster of Arantia VOD servers and also the failure of one of them is managed by our VOD Management Application, that controls all the servers by itself and enables to reallocate a VOD session in another server if the actual one fails, to recover VOD sessions if there is a problem with the power supply for a long period of time, and so on.

The key features of this server are the multiple video formats (SD and HD), the capability of streaming and recording, the functionalities of VOD applications, Personal Video Recording and Time Shifting, the Management Application and the low power consumption.

FEATURES

MEDIA

Media File Formats:	MPEG2 and H.264 Transport Stream
	H.264/MPEG-4 AVC
	MPEG-4 Part 2

STREAMING PROTOCOLS

Transport	HTTP 1.1
	RTSP/RTP
	MPEG TS over UDP
Control	RTSP

STREAMING

Number of streams	95 streams @ 5 Mb/s

TRICK MODE

Supported for	MPEG-2 and H.264
Fast-forward and rewind speeds	2x, 4x, 8x, 16x, 32x, 40x

PERFORMANCE

Processor	CPU INTEL Core i3 2100 3.1 GHZ
System Bus	1600/1333/1066 MHz
Chipset	Intel® Z68 Express Chipset
Memory	1 x 2 GB DDR3 1066 MHz DIMM
Internal storage	1000GB
Hard drives	2 x HD 500 GB SATA2 7200 rpm
Power Supply Standard	600W power supply
Network interface card	1 internal and 2 network cards

LAN SUPPORT

Mother Board	Realtekl® 81111E Gigabit LAN Controller (10/100/1000 Mbits/sec)
PCI	2 x Gigabit 32b Network Card (10/100/1000 Mbits/sec)

A/V

Video	Multi-VGA output support: HDMI and DVI-D, RGB port.
	Support LucidLogix® Virtu-Universal Swichable Graphics Solution.
Audio	Realtek® ALC887 8-channel High Definition Audio CODEC.

EXPANDABILITY

Hard drives	Intel® Z68 Express Chipset:
	- 4x Serial ATA 3.0 Gb/s connectors
	- 2 x Serial ATA 6.0 Gb/s connectors
	- Intel® Rapid Storage Technology supports RAID 0,1,5 and 10
	- Support Intel® Smart Response Techology in Windows Vista/7
Expansion Capabilities	2 x PCI Express 2.0 x 16 slots
	2 x PCI Express 2.2 x 1 slot
	3 x PCI slots
	* The PCIe x 16_2 slot shares bandwidth with PCIe x 1_1 slot, PCIe x 1_2 slot
Expansion Slots	7 PCI slots
USB 2.0 Ports	6
IEEE-1394a interface	4 x DIMMs, max. 32GB, DDR 3
	2200(O.C) / 2133(O.C)/1866(O.C)/1600/133/1066 MHZ, non-ECC,un-buffered memory

CHASSIS

Form factor	4U rack-mount
Height	17,30 cm
Width	48,30 cm
Depth	52 cm
Weight	Maximum weight of 15.1kg
Rack support	4-post sliding rails; 2-Post rails

PORTS

Rear	1 x PS/2 keyboard/mouse combo port
	1 x Optical S/PDIF out port
	1 x HDMI port
	1 x DVI port
	1 x RGB port
	1 x LAN (RJ45) port
	2 x USB 3.0/2.0 ports
	4 x USB 2.0/1.1 ports
	8-channel audio I/O ports

ENVIRONMENTAL

Operating Temperature	10º C to 35º C (50º F to 95º F)
Operating Relative Humidity	20% to 80% non-condensing
Operating Vibration	0.26Grms at 5Hz to 350Hz for 2 minutes
Operating Shock	1 shock pulse of 41G for up to 2ms
Operating Altitude	-16 to 3,048m (-50 ft to 10,000 ft)
Storage Temperature	-40º C to 65º C (-40º F to 149º F)
Storage Relative Humidity	5% to 95% non-condensing (twmax=38C)
Storage Vibration	1.54Grms Random Vibration at 10Hz to 250Hz for 15 minutes
Storage Shock	6 shock pulses of 71G for up to 2ms
Storage Altitude	-16m to 10,600m (-50 ft to 35,000 ft)
Maximum Humidity Gradient	10% per hour, operational and non-operational conditions

5. ENCODERS/TRANSCODERS.

MPEG-2 ENCODER

MPEG-2 real-time encoder and multiplexer for contribution and distribution applications. Its flexibility, high quality video and audio compression, and ease of use, make this product the ideal real-time MPEG-2 encoder for application of content exchange/contribution networks.

MPEG-2 Encoder adopts advanced compressing arithmetic and multiplex technology, supports PAL and NTSC standard and lots of video and audio interface, including analogue composite video, and mono/analogue stereo signal etc. It can maximally encode 4 channel Video and Audio signals and multiplex the correspondent 4 SPTS into 1 MPTS output. It fully complies with MPEG-2 standard and has high encoding quality and efficiency.

FEATURES

- Comply to the ISO/ICE11172 and ISO/ICE13818 standard
- Video channel coding supports MPEG-2 MP@ML(4: 2: 0), bit rate 1.5-15Mbps
- Audio channel coding supports MPEG-1 Layer 1, Layer 2 coding
- Support 4 input Audio signal with coding and multiplexing
- Abundant input/output interface, realizing free connection
- LCD display, flexible in operation
- High reliability design, stable in running
- SNMP remote control supported

SPECIFICATIONS

VIDEO INPUT

Input connector	CVBS
Audio format	supports PAL and NTSC

AUDIO INPUT

Input connector	Analog audio balance or non-balance audio connector (optional)
Support dual sound and stereo	

MPEG TS Output

1 DVB-ASI output	
Comply to EN50083-9 ASI connector	
Max. bit rate	170Mbps
Effective bit rate	3-15Mbps
ASI mode	BYTE
Packet size	188/204 byte
Return loss	>10dB
Connector	BNC, 75ohm

VIDEO CHANNEL CODING

Compress standard	Comply to MPEG-1, MPEG-2 MP@ML(4: 2: 0)
Bit rate	3-15Mbps
Quarter VGA	Support Full D1, Half D1, SIF, QSIF
	PAL: the Max. is 720*576
	NTSC: the Max. is 720*480

AUDIO CHANNEL CODING

Audio sampling rate	32KHz, 44.1KHz, 48KHz
Audio code rate	32, 64, 128, 192, 256, 384Kbps
Compress arithmetic	MPEG-1 Layer 1, Layer II, CD quality

CONTROL

Front Panel	LCD display & cursor/execute keysData Transmission Rate 10/100 Mb/s
SNMP	Optional

POWER

Voltage	AC 90~260V Height
Frequency	50~60Hz
Consumption	Max. 30W

MECHANICAL PARAMETER

Operating Temperature	-10~50ºC
Storage temperature	-10~70ºC
Humidity	10%-95%
Dimension	318mm(W)×483(L)mm×44mm(H)
Weight	6kg

5. ITV MANAGEMENT TOOL

The system administration tool provides regular information to the administrator for the proper management of the services. This menu is fully configurable, depending on the needs of each project and includes, amongst others:

ROOMS MANAGEMENT
Shows details of all of the hotel's rooms with detailed information about the state, viewing and sending of messages, updated expenses, etc.

MUSIC
The music tool allow to mange the music library, edit the title, artist and genre details for each song as well as upload new contents.

PRESS
This section shows a list with all the available newspapers in the system.

INTERNET LINKS
Permits to add, remove or modify the Internet links in the system.

PERSONALIZABLE INTERFACE
It is possible to configure contents in differents services, including the welcome message, system images and internal services.

SHOP
This section allows for the administration of all of the products offered in the system, and the management of the orders from the rooms.

FILMS
Shows a table with details of the films, which are in the system at that time: original title, year, director, cast, price and total viewings in the system. It also administers the option for obtaining viewing statistics between different dates with the possibility to export the list to an Excel document.
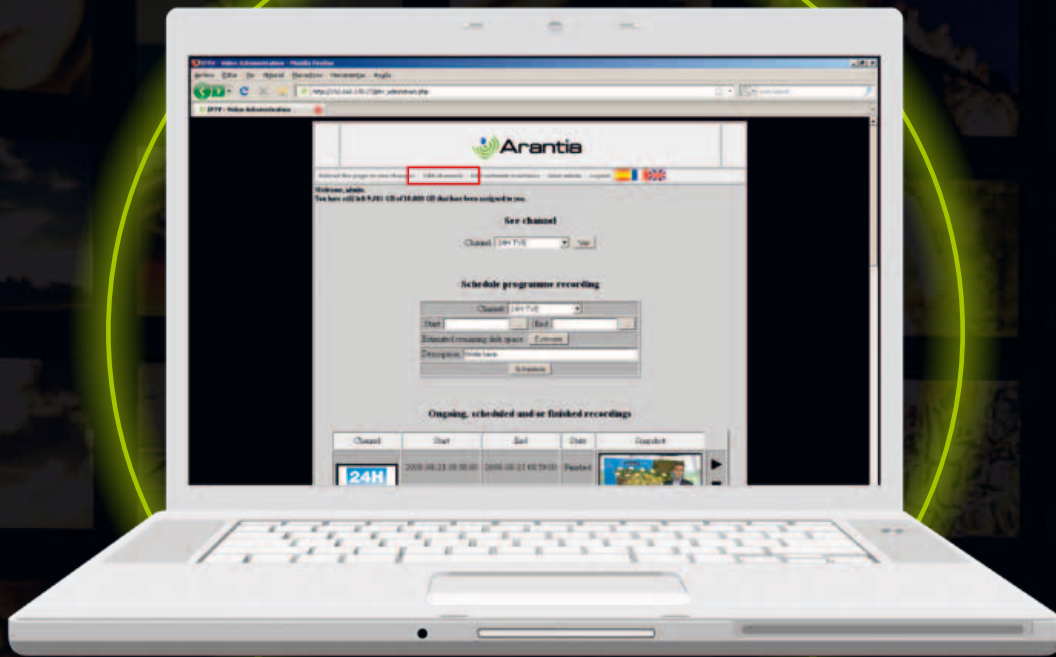

EXPRESS CHECK OUT
With this option the client could speed up the Check Out, thus in the reception all be prepared to make the departure easier.

INVOICES
Detailed information about the expenses and invoicing for each of the rooms.

5. IPTV MANAGEMENT TOOL. CHANNELS

This administration tool provides all the necessary options to manage the system channels. Simplicity for using and managing takes priority.


In the channels edition submenu, we can edit all the associated parameters:

- Channel logo.
- Channel name.
- Associated channel number.
- IP of the Streamer Server.
- Multicast IP channel.
- Multicast Port.
- Audiopid, videopid, pcrpid.

If the channel is activated, it will be displayed as available for the final user (It will appear in the channel mosaic in the user interface). Otherwise it won't appear in the main screen.

Besides, it's possible to add new channels, which weren't available up to now in the Data Base. This process will be done in the same screen, introducing the channel data in the specific place.
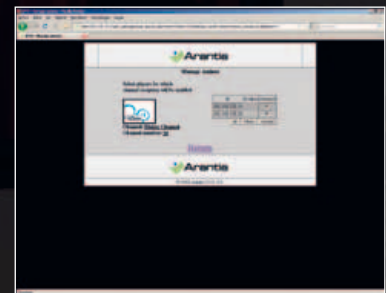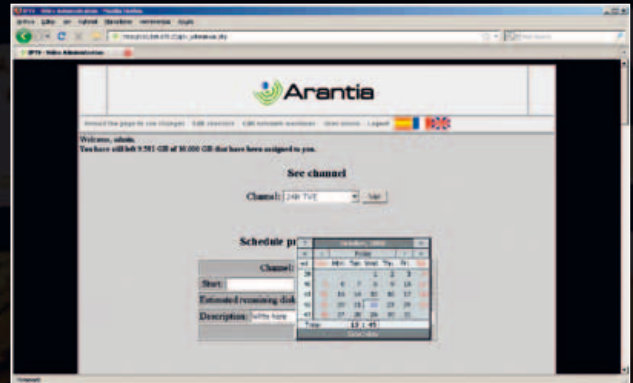
For each channel, it's possible to manage the users we can allow to watch every available IPTV channel.
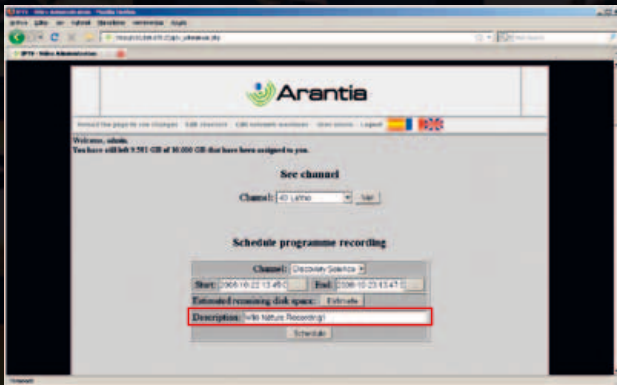
IPTV MANAGEMENT TOOL. **PVR**

This tool will be used as programs recording platform, for subsequent display by the users at any moment. The procedure to be followed is very simple:
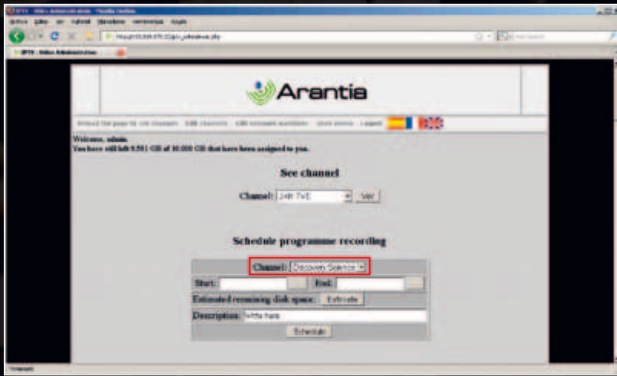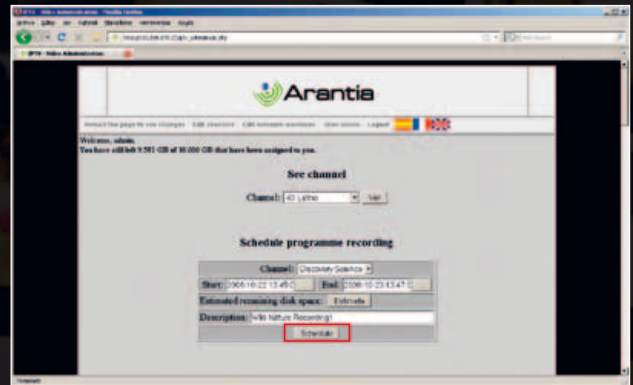

1. Select the channel to record.

2. Select the initial date and time, and the final date and time, with the help of the emerging calendars.

3. Write a description to identify the record.

4. Finally, confirm the programming record.

In that moment, the record will be added to the list, and the state will be Scheduled, till the start time of the record.

Every record will have the following associated information:
- Channel logo.
- Initial and final date.
- Record state.
- Snapshot (first record frame).
- Description.

6. DIGITAL HOSPITAL

Arantia offers a digital platform for the provision of comprehensive entertainment, information and communications services. A tool for improving patient satisfaction.

BENEFITS

For the patient:

Increased satisfaction. Improvement of quality of life and personal autonomy through new entertainment, information and communications services.

For hospital management:

Improvement in the quality of services for patients.

KEY FACTORS

- Global solution for digital services.
- Maximum ease of use.
- Scalable for each project.
- User and services interfaces can be personalised.
- Flexible tools for systems operation and maintenance.
- Turnkey solution including the design, development, personalisation, start-up and support services.

INTEGRATED SERVICES

- IP Television (IPTV)
- Digital Radio
- Internet
- E-mail
- Videoclub
- Music
- Corporate channel
- Internal Services
- News
- Information services
- Promotion & advertising
- E-shopping
- Pre- and post-payment management
- Multilingual support

6. DIGITAL HOSPITAL

TECHNOLOGICAL ARCHITECTURE

Main Communications Rack
Communications rack centralising the reception
and distribution of digital television, radio, internet, on-
demand contents and interactive services to all users.
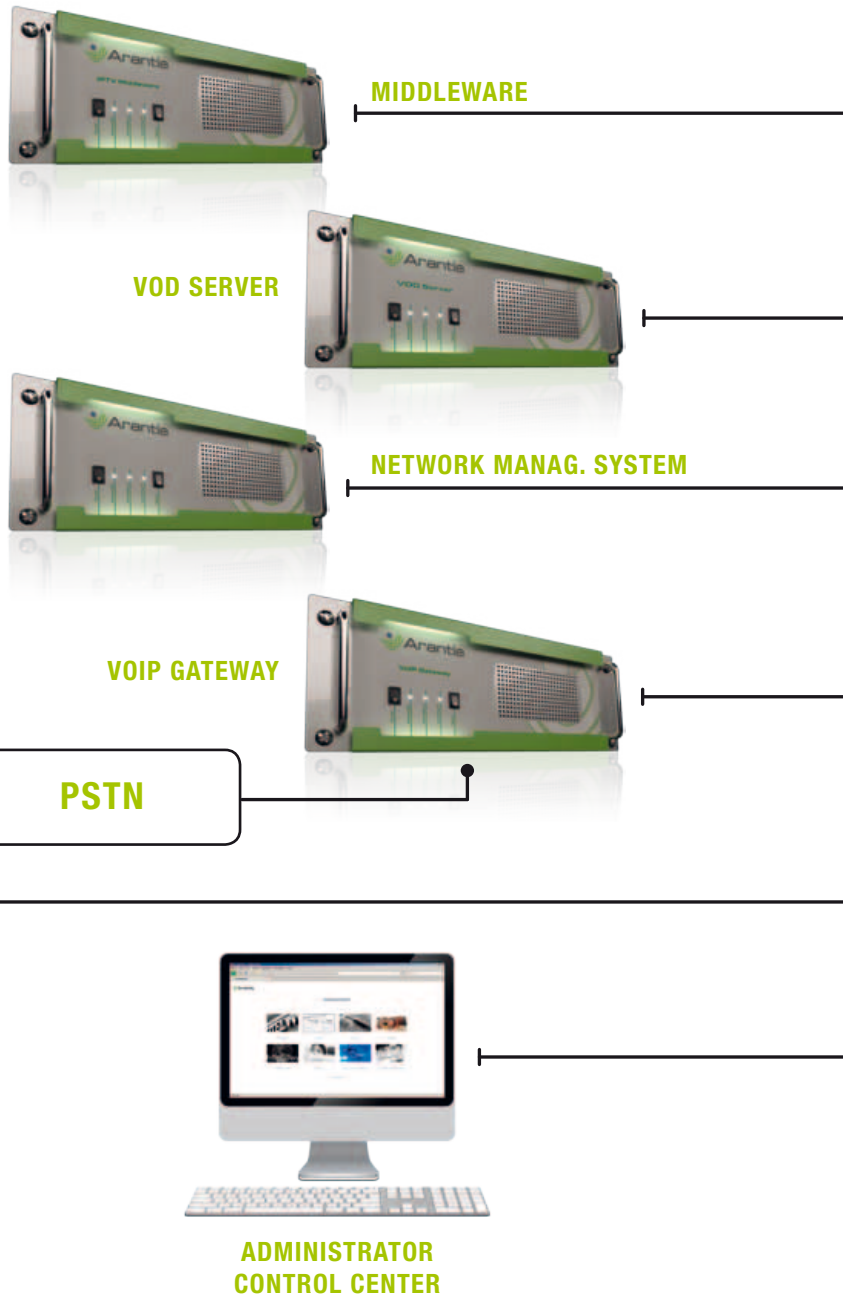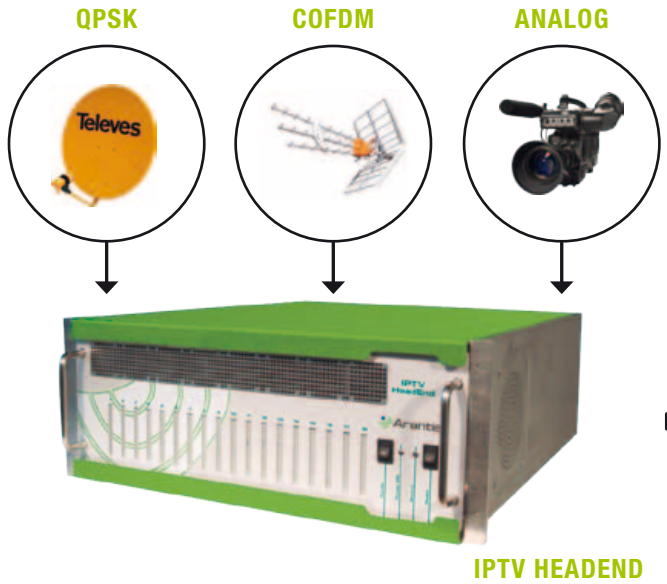
Patient Terminal
Integrates all the platform services in one intuitive and
user-friendly interface.
Distribution Network
IP data network that distributes the services from
the main communications rack to each patient
terminal and payment terminal. It must support
multicast and unicast IP management services.
In some cases the distribution of conventional TV
services is done through the traditional antenna
network.

Payment Terminals
This equipment facilitates methods of payment to the
user if a pre-paid control system is used. Otherwise
it is integrated in the hospital management system to
include the services directly in the invoice.

QPSK

COFDM

ANALOG

IPTV HEADEND

MIDDLEWARE

VOD SERVER

NETWORK MANAG. SYSTEM

VOIP GATEWAY

PSTN

PAYMENT TERMINAL

**ADMINISTRATOR
CONTROL CENTER**

HOSPITAL MANAG. SYSTEM

INTERNET

ROUTER FIREWALL

ROUTER FIREWALL

MAIN SWITCH

IP PHONE

SECONDARY SWITCH

SECONDARY SWITCH

SECONDARY SWITCH

SECONDARY SWITCH

SECONDARY SWITCH

STB USER

STB USER
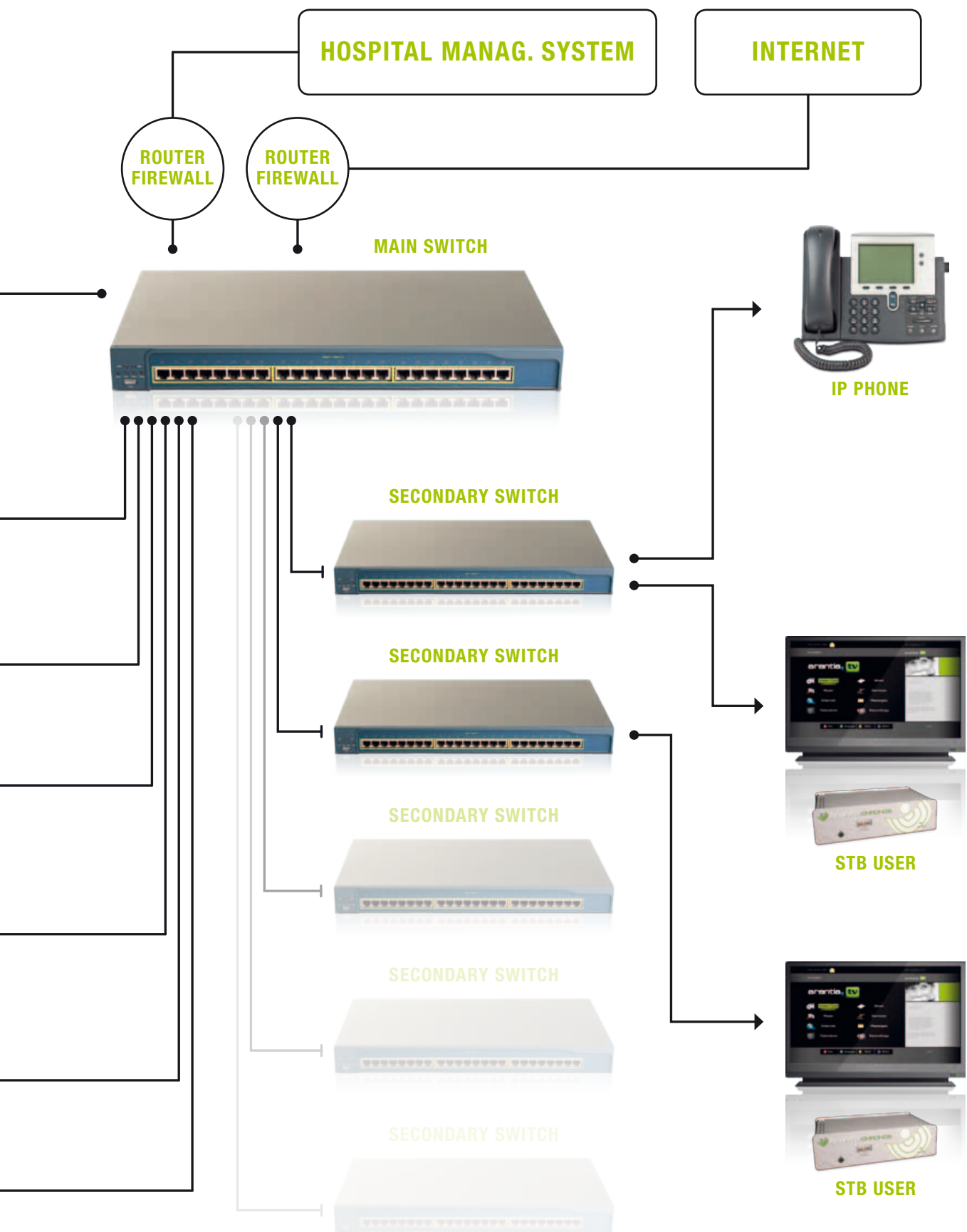
7. DIGITAL MARKETING

Arantia offers an audiovisual digital communication platform which will completely revolutionise your communications and marketing strategy, allowing you to spread your message in the most effective manner, attracting new customers, boosting your brand image, increasing the impact of your messages, reducing your operating costs and maximising your sales.

7. DIGITAL SIGNAGE

ARANTIA provides a new communication tool that allows you to combine images, video and audio to deliver your message in a more effective way, thanks to the most innovative audiovisual technology.

connect with yo

MAKE ARANTIA THE IDEAL PARTNER FOR YOUR BUSINESS

Achieve effective and real time communication: Arantia allows you to obtain maximum audiovisual impact. The use of attractive multimedia presentations will ensure that your messages do not go unnoticed by your potential clients, increasing client loyalty rates and reducing the time between the advertising impact and the moment of purchase.

Attract customers: attract customers to your business by means of an impressive dynamic presentation. Digital Signage attracts more consumers to your premises and prolongs the time they stay at your point of sale, increasing the probability of a purchase.

Increase the impact of your messages: Digital Signage has a greater impact than traditional static signage. Amaze your clients.

Maximise your sales: over 70% of decisions to buy are made at the point of sale. Digital signage allows you to influence the behaviour of your clients through the effective communication of your promotional messages precisely when they are most likely to make a purchase.

Improve your clients' shopping experience: reduce your clients' perception of waiting time, keeping them informed and entertained whilst they are in your facilities.

Increase your brand value: an impressive and effective dynamic advertising system will help you to improve your brand image and increase client loyalty.

Target your communications: send your message to the precise audience at exactly the right time. Use different screens to show different messages and react quickly to changing circumstances by programming events in real time.

Ensure that your staff are trained and informed: communicate with your employees by distributing corporate messages at their workstations.

Manage your business efficiently: establish new income models and tools to reduce costs. Reduce your dependency on printed promotional materials and the associated generation of waste. Investigate new forms of financing for your digital signage system, such as co-branding and renting out advertising space in your establishment.

Receive comprehensive reports from your system: Arantia provides you with detailed information about the contents that have been played at each place and time, allowing you to cross reference statistics with your sales information and making it easier to provide third parties with invoices for the rental of publicity space.

Make your advertising work after business hours: A digital signage screen in your shop window will extend the advertising impact of your messages even when the shop is closed, getting your message across 24 hours a day, 7 days a week.

arantia. DS D2

our audience...

MARKETS

- Hotels, restaurants and bars.
- Stations, airports and large, busy public areas.
- On the inside and outside of public transport vehicles.
- Corporate communications.
- Leisure installations.
- Museums, trade fairs, conferences and exhibitions.
- Cinemas and theatres.
- Shopping centres.
- Hospitals and medical centres.
- Public Administration and unique buildings.
- Universities and other educational centres.
- Banks.
- Estate agents and travel agents.
- Car dealerships.
- Points of sale.

7. DIGITAL SIGNAGE

ARANTIA provides a dynamic marketing tool that allows you to communicate more effectively with your clients and employees by means of a series of screens that, when linked through a LAN or WAN network, will display your scheduled multimedia contents. You can make all the screens show the same content in a synchronised way or each screen or a group of screens display different content.

communication

WITH DIGITAL SIGNAGE YOU CAN:

1. Create attractive multimedia content quickly and simply to communicate your message through your network of screens.

2. Programme the date, time and the screens in which you would like to display the created contents.

3. Manage and monitor your entire digital signage system through an intuitive web interface from anywhere in the world and from any computer.

DIGITAL SIGNAGE BRINGS YOUR COMPANY:

Flexibility: execute Digital Signage Manager from any desktop or laptop computer from anywhere in the world.

Scalability: Arantia provides a solution that can adapt to all kinds of needs, sizes and budgets. Digital Signage allows you to improve your target audience, whether you have a modest business with a single screen or a large network of offices in different locations.

Simple to use: thanks to its intuitive interface, a series of screens with predefined content that are completely configurable, and guided steps to help you enter data, you need not have any previous experience to use our software. Upload files, create contents and programme events in four easy steps, in a simple and intuitive way and from any PC or laptop.

Reliability: the Digital Signage monitoring service automatically checks the connection of all the equipment and ensures that all files have been successfully transferred.

Security: A comprehensive management of users allows you to assign permissions and profiles to your employees, enabling the hierarchical management of your Digital Signage.

on the go!

DIGITAL SIGNAGE ALSO ENABLES YOU TO:

Automatically configure the network: when a new player is installed in the network, this will be automatically recognised by the Digital Signage Manager, making it accessible for event programming.

Use your network efficiently: Digital Signage Network Manager allows you to establish file transfer policies, allowing you to make better use of your network.

Keep a record of played content: all the information about broadcast contents is recorded in the system, so that if you decide to incorporate third party advertising, you can easily obtain the necessary information to manage your invoicing.

Control your screens remotely: turn your screens on or switch them off automatically according to your business hours to achieve improved energy efficiency, or adapt the audio volume of your presentations to each environment.

Re-use previously created contents: simple processing of previously created contents allows you to adapt them to new circumstances and re-use them easily.

Manage different centres centrally: from Digital Signage Network Manager, you will be able to control various centres in different locations through a simple internet connection.

8. TOTEM AND DIGITAL SIGNAGE

Maximize the efficiency of your communication strategy by presenting different types of information simultaneously at one signalling point. This is possible thanks to the independent management of each of the system's viewing screens. Information on events, addresses, promotion of internal services, advertisement. Any digital information will have real time updating or programming before hand by using the content management software, specially designed for an optimum and easy handling in any situation

- Innovative and state of art design specially conceived for its integration at any locating point.

- Emphasize the company's image with completely customized solutions through logotypes and colours.

- Independent management of the information displayed on each one of the viewing screens.

- Allows presenting different types of digital information (information on events, addresses, advertisement and promotion) at one signalling point.

CONTENT MANAGEMENT SOFTWARE OVER THE NETWORK

- Software for content management at each signalling point, ready for online local or remote updating.

- Admits manifold information source formats, obtaining a great visual impact in the composition of contents.

- On-line management of several signalling points, with real time update and programming of the information to be displayed at every moment from one or several control centres.
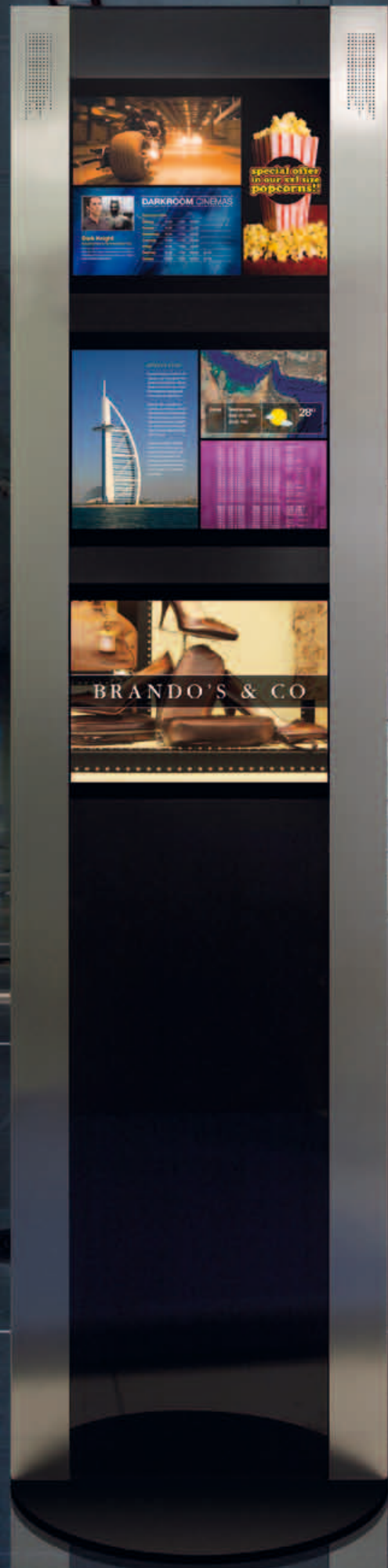
9. HIGH SPEED INTERNET ACCESS. REF. Z0305029

HSIA SYSTEM MANAGER

Arantia provides all the necessary tools to give users a high speed Internet access, through both wired and wireless networks.

The HSIA System Manager facilitates the deployment of Internet access services in different environments, with totally customizable services and user interfaces and different business models including:

- User access control through both wired and wireless networks.

- Generation of different packages for billing of services depending on usage and access to the system.

- Flexibility in defining the operating model, free of charge or payable.

- Customization of the user interface with the corporate identity of the company.

- Integration with the management system to include automatically the services in the invoice.

FEATURES HSIA

PERFORMANCE

Processor	CPU INTEL Core i3 2100 3.1 GHZ
System Bus	1600/1333/1066 MHz
Chipset	Intel® Z68 Express Chipset
Memory	1 x 2 GB DDR3 1066 MHz DIMM
Internal storage	1000GB
Hard drives	2 x HD 500 GB SATA2 7200 rpm
Power Supply Standard	600W power supply
Network interface card	1 internal and 2 network cards

LAN SUPPORT

Mother Board	Realtekl® 81111E Gigabit LAN Controller (10/100/1000 Mbits/sec)
PCI	2 x Gigabit 32b Network Card (10/100/1000 Mbits/sec)

A/V

Video	Multi-VGA output support: HDMI and DVI-D, RGB port.
	Support LucidLogix® Virtu-Universal Swichable Graphics Solution.
Audio	Realtek® ALC887 8-channel High Definition Audio CODEC.

EXPANDABILITY

Hard drives	Intel® Z68 Express Chipset:
	- 4x Serial ATA 3.0 Gb/s connectors
	- 2 x Serial ATA 6.0 Gb/s connectors
	- Intel® Rapid Storage Technology supports RAID 0,1,5 and 10
	- Support Intel® Smart Response Techology in Windows Vista/7
Expansion Capabilities	2 x PCI Express 2.0 x 16 slots
	2 x PCI Express 2.2 x 1 slot
	3 x PCI slots
	* The PCIe x 16_2 slot shares bandwidth with PCIe x 1_1 slot, PCIe x 1_2 slot
Expansion Slots	7 PCI slots
USB 2.0 Ports	6
IEEE-1394a interface	4 x DIMMs, max. 32GB, DDR 3
	2200(O.C) / 2133(O.C)/1866(O.C)/1600/133/1066 MHZ, non-ECC,un-buffered memory

CHASSIS

Form factor	4U rack-mount
Height	17,30 cm
Width	48,30 cm
Depth	52 cm
Weight	Maximum weight of 15.1kg
Rack support	4-post sliding rails; 2-Post rails

PORTS

Rear	1 x PS/2 keyboard/mouse combo port
	1 x Optical S/PDIF out port
	1 x HDMI port
	1 x DVI port
	1 x RGB port
	1 x LAN (RJ45) port
	2 x USB 3.0/2.0 ports
	4 x USB 2.0/1.1 ports
	8-channel audio I/O ports

ENVIRONMENTAL

Operating Temperature	10º C to 35º C (50º F to 95º F)
Operating Relative Humidity	20% to 80% non-condensing
Operating Vibration	0.26Grms at 5Hz to 350Hz for 2 minutes
Operating Shock	1 shock pulse of 41G for up to 2ms
Operating Altitude	-16 to 3,048m (-50 ft to 10,000 ft)
Storage Temperature	-40º C to 65º C (-40º F to 149º F)
Storage Relative Humidity	5% to 95% non-condensing (twmax=38C)
Storage Vibration	1.54Grms Random Vibration at 10Hz to 250Hz for 15 minutes
Storage Shock	6 shock pulses of 71G for up to 2ms
Storage Altitude	-16m to 10,600m (-50 ft to 35,000 ft)
Maximum Humidity Gradient	10% per hour, operational and
non-operational conditions	

Specifications subject to change without notice.

10. **VOIP**. IP TELEPHONY SOLUTIONS

Arantia offers you a global IP telephony platform that integrates all the necessary functions to support your company's telephone services, with maximum reliability, scalability and an extensive range of value added services including: **VoIP PBX, Fax, Instant Messaging, E-mail, Collaborative Services and Call Centre.**

a scalable and flexible platform...

The VoIP platform provides a powerful hardware and software tool to improve the management of your company, increasing productivity levels and ensuring cost reductions whilst offering a host of new value added services that benefit brand image and service to end clients.

The VoIP platform offers a scalable and flexible solution which can be fully customised according to the project's communication needs and offers numerous advantages including:

- Total integration of voice, data and video services in one network with the subsequent saving in investment, infrastructure and maintenance costs.

- Reduction of telephone-related expenditure thanks to the channelling of local or remote in-company calls through the IP network.

- Incorporation of value added services to ensure greater efficiency in the company's management and to improve its image to third parties.

in answer to your needs

TECHNOLOGY ARCHITECTURE

VoIP Gateway
It is the main element in the VoIP platform and manages the connection with the external network via the telephone access as well as the communications in the internal network. It similarly supports the deployment of VoIP services according to the project needs.

External Telephone Access
It establishes the connection with the external telephone operator through a primary, RDSI or analog link.

Hard-wired Phone
Device that provides access to IP telephony services.

Cordless Phone
Device that provides access to IP telephony services through wireless networks.

Phone Client in Pc
Software installed in the client's PC to make and receive calls and to provide access to services without any need for a specific IP telephone.

10. VOIP. IP TELEPHONY SOLUTIONS

Total convergence of IP services.
An extensive range of voice and value added services in answer to your needs:

Basic VoIP services
- Receive and make external calls via a data line (ADSL, T1, etc.).
- Receive and make external calls via a conventional analog line.
- Receive and make external calls via an RDSI or PRI line.
- Support available in several languages.

Call and PBX services
- Call transfers and forwarding.
- Display of the incoming caller number.
- Call waiting.
- Follow-me support.
- Support for ring groups.
- Configuration by time periods.
- DISA support.
- Call back support.

Collaboration
- Calendar integrated with PBX with voice recording support.
- Telephone book with click-to call feature.

Instant Messaging
- Instant Messaging server integrated to PBX with Jabber protocol support.
- Start calls from the messaging client (Spark).
- Messaging server can be Web-configured.
- Support for user groups.
- Support for connection to other messaging networks.
- User sessions report.
- Plug-ins support.
- LDAP support.

Rates
- Integration with invoicing and PMS systems.
- Call detail record (CDRs) with support for searches by date, extension and other criteria.
- Rates with usage report by destination, etc.
- Report of channel usage by SIP, ZAP, IAX, Local, H.323 technology.
- Log of received calls and query with various filters.

Management of incoming and outgoing calls
- Automatic operator.
- Call waiting service.
- Support for call queues.
- Conference centre.
- Identification of calls.
- IVR.
- Text-voice conversion.
- Definition of incoming and outgoing routes.
- Recording of interface calls via the Web.

Voice mail
- User and group voice mail.
- Receive messages through the Web and DISA.
- Notification of messages by e-mail.

FAX
- Fax server can be managed via the Web.
- Integrated Fax viewer.
- Fax to e-mail application.
- Access control for fax clients.

Management and administration
- Web Editor for configuration files.
- Interactive Web access to the system's console.
- Tool to create extension batches.
- Integrated echo canceller.
- Web tool for terminal installation.
- Support for videophones.
- DHCP Server.
- Operator panel .
- Supports SIP, IAX, H.323, MGCP and SKINNY protocol, amongst others.
- Supported codecs: ADPCM, G.711 (A-Law & µ-Law), G.722, G.723.1 (pass through), G.726, G.729, GSM, iLBC.
- Management of link trunking.
- System resource monitor.
- Network parameter configuration tool.
- Switchboard turn off/reboot function via the Web.
- Centralised management of users and profiles.
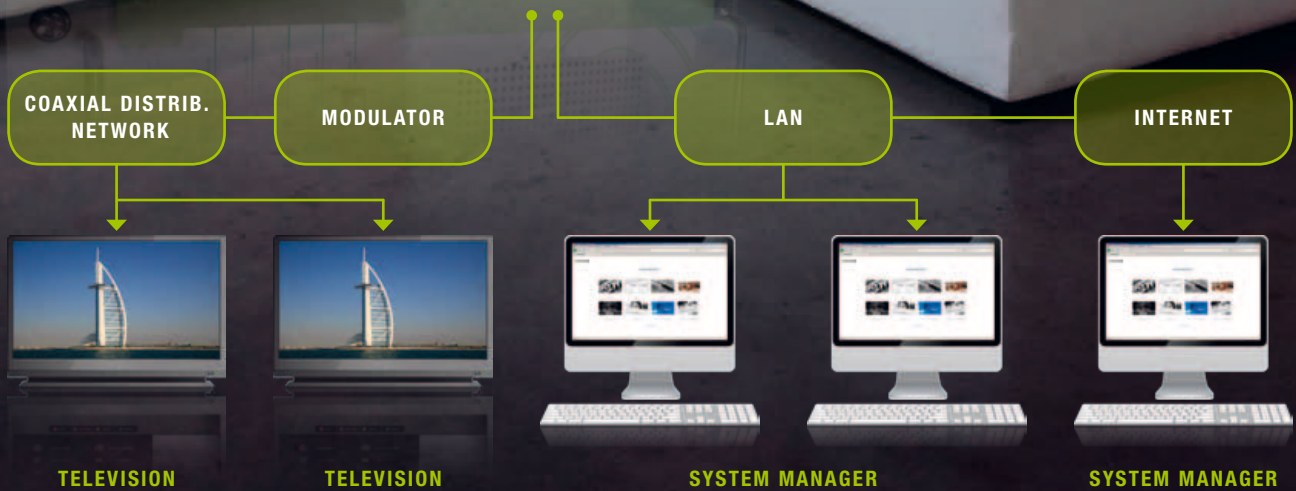
11. CORPORATE TV. REF. Z0101008

A new audiovisual communication tool directly to the users.
Corporate TV provides you a new tool to create and distribute your
own TV channel according to your needs and through different
distribution networks.

Corporate TV is a complete solution that includes the necessary
hardware and software to manage the programs you want to
broadcast at every moment, and the subsequent distribution through
a TV or data network to all the desired users.

BASIC FEATURES

• It allows to create and distribute your own TV channel through the
television and/or data network in the establishment.

• It includes a web based management software to create the TV
channel, to add or delete contents in the channel. Contents will be
played in a loop.

• Compatible with the main web browsers.

COAXIAL DISTRIB. NETWORK — MODULATOR — LAN — INTERNET

TELEVISION   TELEVISION   SYSTEM MANAGER   SYSTEM MANAGER

FEATURES CORPORATE TV

PERFORMANCE	
Processor	CPU INTEL Core i3 2100 3.1 GHZ
System Bus	1600/1333/1066 MHz
Chipset	Intel® Z68 Express Chipset
Memory	1 x 2 GB DDR3 1066 MHz DIMM
Internal storage	1000GB
Hard drives	2 x HD 500 GB SATA2 7200 rpm
Power Supply Standard	600W power supply
Network interface card	1 internal and 2 network cards
LAN SUPPORT	
Mother Board	Realtekl® 81111E Gigabit LAN Controller (10/100/1000 Mbits/sec)
PCI	2 x Gigabit 32b Network Card
	(10/100/1000 Mbits/sec)
A/V	
Video	Multi-VGA output support: HDMI and DVI-D, RGB port.
	Support LucidLogix® Virtu-Universal Swichable Graphics Solution.
Audio	Realtek® ALC887 8-channel High Definition Audio CODEC.
EXPANDABILITY	
Hard drives	Intel® Z68 Express Chipset:
	- 4x Serial ATA 3.0 Gb/s connectors
	- 2 x Serial ATA 6.0 Gb/s connectors
	- Intel® Rapid Storage Technology supports RAID 0,1,5 and 10
	- Support Intel® Smart Response Techology in Windows Vista/7
Expansion Capabilities	2 x PCI Express 2.0 x 16 slots
	2 x PCI Express 2.2 x 1 slot
	3 x PCI slots
	* The PCIe x 16_2 slot shares bandwidth with PCIe x 1_1 slot, PCIe x 1_2 slot
Expansion Slots	7 PCI slots
USB 2.0 Ports	6
IEEE-1394a interface	4 x DIMMs, max. 32GB, DDR 3
	2200(O.C) / 2133(O.C)/1866(O.C)/1600/133/1066 MHZ, non-ECC,un-buffered memory
CHASSIS	
Form factor	4U rack-mount
Height	17,30 cm
Width	48,30 cm
Depth	52 cm
Weight	Maximum weight of 15.1kg
Rack support	4-post sliding rails; 2-Post rails
PORTS	
Rear	1 x PS/2 keyboard/mouse combo port
	1 x Optical S/PDIF out port
	1 x HDMI port
	1 x DVI port
	1 x RGB port
	1 x LAN (RJ45) port
	2 x USB 3.0/2.0 ports
	4 x USB 2.0/1.1 ports
	8-channel audio I/O ports
ENVIRONMENTAL	
Operating Temperature	10º C to 35º C (50º F to 95º F)
Operating Relative Humidity	20% to 80% non-condensing
Operating Vibration	0.26Grms at 5Hz to 350Hz for 2 minutes
Operating Shock	1 shock pulse of 41G for up to 2ms
Operating Altitude	-16 to 3,048m (-50 ft to 10,000 ft)
Storage Temperature	-40º C to 65º C (-40º F to 149º F)
Storage Relative Humidity	5% to 95% non-condensing (twmax=38C)
Storage Vibration	1.54Grms Random Vibration at 10Hz to 250Hz for 15 minutes
Storage Shock	6 shock pulses of 71G for up to 2ms
Storage Altitude	-16m to 10,600m (-50 ft to 35,000 ft)
Maximum Humidity Gradient	10% per hour, operational and
non-operational conditions	

Arantia

Arantia 2010, S.L.

HEAD OFFICE
Volta do Castro, s/n · 15706 Santiago de Compostela, La Coruña (SPAIN)
T +34 902 209 040 · F +34 981 524 428 · E-mail: arantia@arantia.com
www.arantia.com

MIDDLE EAST OFFICE
P.O. Box 17199 · Jebel Ali Free Zone · Dubai, United Arab Emirates
T +971 4 8834344 · F +971 4 8834644 · E-mail: ame@arantia.com
www.arantia.com/en

http://www.facebook.com/ArantiaTelevesCorp

http://www.linkedin.com/company/arantia-televes-corp

http://www.youtube/televescorporation