

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**.



We are a systems engineering and telecommunication services company specialising in providing global solutions to organisations through the development and integration of the most innovative technological solutions

We offer a wide range of advanced solutions and services which cover the entire value chain in different sectors, from the initial consultancy and design stage, to the development of products, the development and integration of technological solutions, their introduction and their subsequent 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 capable of leading the convergence of Digital Television, Internet, and the access to on-demand content and interactive services, through research and the development of new multimedia and audiovisual applications, products and services with IP technology.



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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 architecture and scalable 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, PC or mobile phone.

the answer to your needs

Quadruple 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.

IPTV HEADEND

Supports the reception from different input signals (DVB-T, DVB-C, DVB-S/S2, IP and ASI), descrambling, rescrumbling 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.

EPG GENERATOR

Element of the system that generates the electronic program guide of channels and contents available to the end user.

STORAGE

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

SCHEDULING

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

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.

INTERNET TV PORTAL

This system is in charge of present the different applications and services that allow the user to access, through Internet, to the available digital contents.

MOBILE TV PORTAL

This system is in charge of present the different applications and services that allow the user to access, through a mobile terminal, to the available digital contents.

DIGITAL SIGNAGE MIDDLEWARE

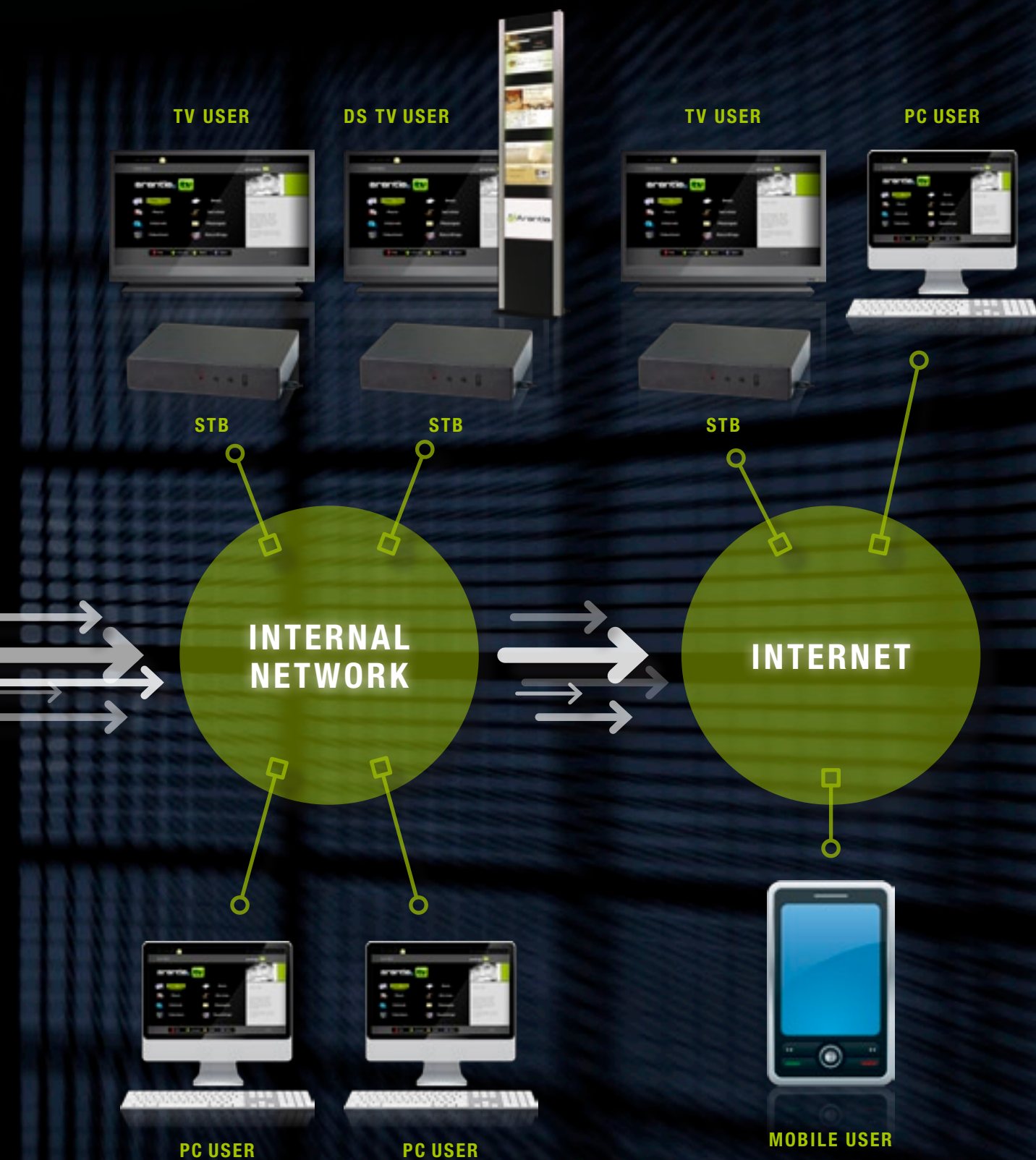
This server allows the management of the contents and services to be shown on each digital signage view point, to be controlled in a centralized manner.

VOD SERVERS

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

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.



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 technology, 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.

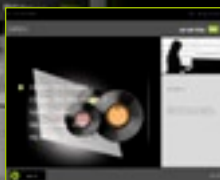




VIDEO ON-DEMAND



INTERACTIVE SERVICES



MUSIC



INTERNET ACCES

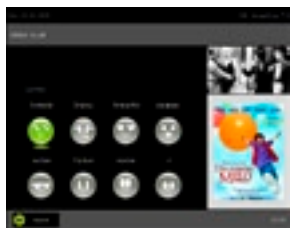


PVR



IP TELEVISION

3. A NEW DIGITAL ENTERTAINMENT EXPERIENCE



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.



NEWS

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



MUSIC

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



INTERNET

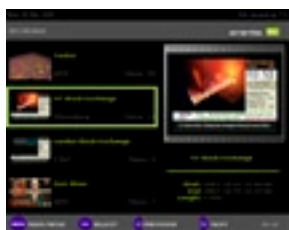
It enables TV Internet access to view a webpage or one's Email boxes.





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.



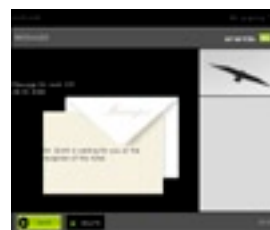
PVR

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



CORPORATE CHANNEL

Offers corporate users an own TV channel for promoting in-house services that is totally and dynamically updatable.



MESSAGING

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



3. A NEW DIGITAL ENTERTAINMENT EXPERIENCE



PROMOTION AND ADVERTISING

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



INTERNAL SERVICES

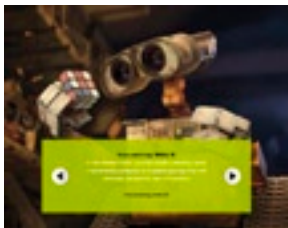
This presents the services the hotel offers for your enjoyment without need for you to leave your guestroom: shop, room service, wakeup call, express check-out, invoice consultation, booking facilities...



ALARM SYSTEM

Automatic switching of all the screens in the system to display an alarm message (Ex: in case of fire in the establishment).





EPG

In that guide the user can easily and quickly find all the channels the TV provider offers. The EPG represents the evolution of the traditional programming service that offers the teletext.



IPCCTV

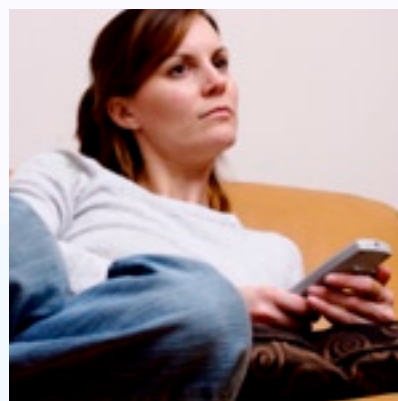
The IP surveillance system can be integrated with the IPTV platform, that would allow you to centralize the management of all the components through the same administration interface and using just one IP distribution network.



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, PC or mobile phone.

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, PC or mobile phone.
- 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 scalability 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.

**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 operating 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.

5A. 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, regardless 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, rescrumbling 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.

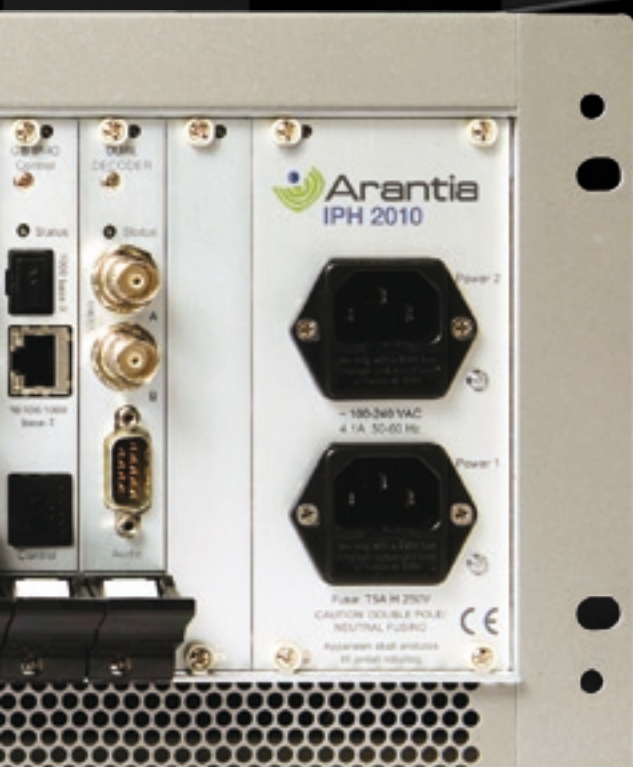
Allows channels to be inserted with ease, given the versatility and flexibility of the headend configuration.

Descrambling.

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

Scrambling.

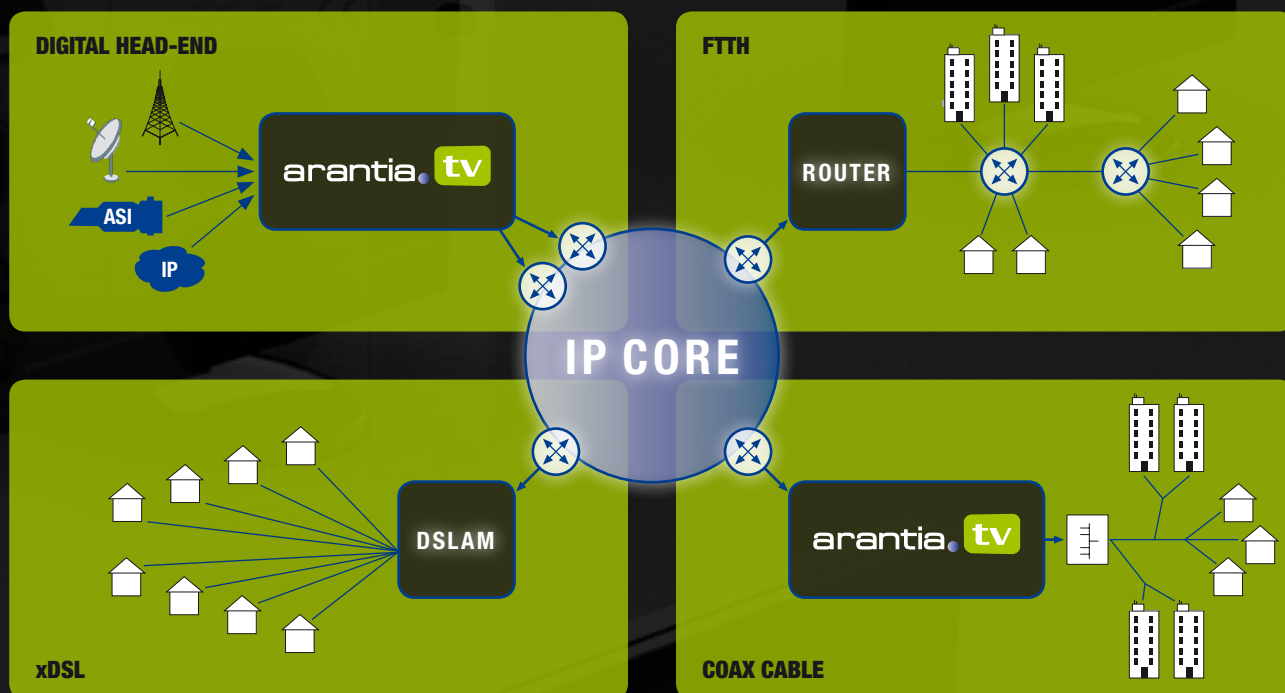
Compatible with most CA on the market which support the AES and DVB CSA algorithms.



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



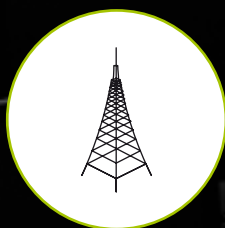
DVB-T

DVB-C

ASI

IP

**DVB-S
DVB-S2**



IP

QAM

**RF w
NICAM/A2**



DeScramble

Scramble

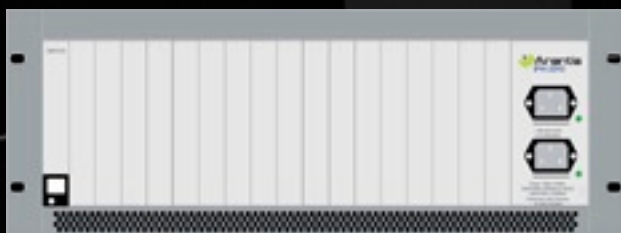


ASI

COMPOSITE VIDEO
BALANCED STEREO
AUDIO

FM RADIO

5A.1 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.

5A.2 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)

5A.3 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.

5A.4 IPTV HEADEND: INPUT MODULES



1. Ethernet Input w/Management

Product code: Z0106005

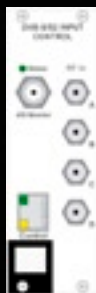
- 10/100/1000 BaseT input card (RJ45).
- Mini-GBIC interface (SFP) for optical input.
- Supports UDP/RTP Multicast/Unicast reception.
- Supports reception of MPTS and SPTS.
- Service filtering.
- PCR regeneration.
- 10/100/1000 BaseT management port (RJ45).
- Enables WEB management.
- 1 slot wide.



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.

5A.5 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

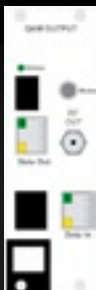
- 10/100/1000 BaseT input card (RJ45).
- Mini-GBIC interface (SFP) for optical input.
- Supports UDP/RTP Multicast/Unicast transmission.
- Supports multiple output cards.
- Streaming of up to 850 Mbit/s.
- Maximum 250 service per output card.
- Supports streaming of SPTS.
- Supports streaming of MPTS 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.



6. Decoder w/RF output and DVB CA

Product code: Z0106027

- 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
- RF modulation (VHF/UHF) output – F connectors
- External mute of RF output
- 2 slots wide



7. Decoder w/RF output, DVB CA and NICAM/A2 STEREO

NICAM product code: Z0106028

STEREO product code: Z0106029

- 2 decoders per module
- MPEG-2 DVB 4:2:0 MP@ML decoding
- DVB and AES descrambling (option)
- VBI re-insertion (WSS, WST/EBU Teletext, VPS, VITS)
- DVB and EBU subtitling
- 2 DVB Common Interfaces. One per channel
- RF modulation (VHF/UHF) output – F connectors
- External mute of RF output
- NICAM or A2 stereo audio
- Alarm relay reflecting all critical alarms for the module
- 3 slots wide



8. FM Radio with RDS

Product code: Z0106033

- 8 independent radio channels per module
- Decoding of MPEG-2 audio
- FM modulation and up-conversion to FM band
- Fully agile independent frequency setting for each channel
- RDS insertion - UECP SPB490 or static
- One RF output connector, F-type, with all 8 channels
- MPX test output
- 1 slot wide

5A.6 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

5A.7 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.

5A.8 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.

5A.9 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

5A.10 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, 75 Ω
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 k Ω

Output level adjustment: -10dB to +6dB, step size 0.5dB

Output Impedance: <50 Ω

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: <3°

Idle Channel Noise (DAC active): <-74dB

5A.11 IPTV HEADEND: RF OUTPUT SPECIFICATIONS**VHF/UHF**

Analogue modulation: PAL B/G and SECAM L

RF output frequency range: 47– 862MHz

RF tuning step size: 12.5 kHz

Output level: 105 to 117 dB μ V

Output level adjustment step size (GUI): 0.1 dB

Connector: Type F, female

Output impedance: 75ohm

Return loss: >13dB (to be confirmed)

Audio carrier output level (relative to video carrier): -13dB, min -15dB, max -12dB

Video carrier frequency stability: \pm 30 kHz

Audio inter carrier frequency stability: \pm 5 kHz

C/N: >60dB

Carrier to spurious (in-channel): >60dB

Carrier to spurious, full band (40 – 862MHz):

>60dB (47-400 MHz)

>55dB (400-862 MHz)

*Carrier to spurious, low spurious versions**:*

> 60dB (Low band)

> 65dB (mid Band and High Band)

Single channel intermodulation:

\geq 65dB (47-600 MHz)

\geq 60dB (600-862 MHz)

**The low spurious versions come in the following bands:

Low band: 47-340 MHz *Mid band:* 330-640 MHz *High band:* 480-862 MHz

VIDEO (DEMODULATED VIDEO)

Differential gain: <3 %

Differential phase (B/G/I): <3°

Group delay variations (B/G/I): <80 ns

Luminance non-linearity (B/G/I): < 2 %

2T K factor: <3 %

5A.12 IPTV HEADEND: STEREO SOUND SPECIFICATIONS**NICAM**

NICAM modulation: According to ETSI EN 300 163 v1.2.1, Fully synchronous operation, Digital J17 preemphasis.

Modes: B/G or I

Carrier frequency: 5.85 and 6.552 MHz

Audio input: Stereo/ single mono mode (Reserve sound flag ag on/off)

Input precision: 16 bit, 32 kbit/s

Latency: 1 ms (for stereo)

Output precision: 10 bits

NICAM carrier level relative to vision carrier: 20dB, adjustable \pm 3dB

Frequency accuracy: \pm 1ppm

A2 STEREO

Two sound-carrier FM system (A2): According to ITU-R BS.707, Annex 1

Frequency referred to vision carrier: f1=5.5 MHz, f2=5.742 MHz

Power referred to peak vision: f1= -13dB, f2= -20dB

Modulation: FM

Audio-bandwidth: 40 to 15 000 Hz

Audio output modes: Stereo/Dual Mono/Mono

5A.13 IPTV HEADEND: FM RADIO SPECIFICATIONS**DECODER**

Number of channels per module: Up to 8

Decoding of the following formats is supported: MPEG-1 layers 1 and 2 (Musicam), MPEG-2 layer 2

FM OUTPUT

Modulation: FM radio

RF output frequency range: 87.5 - 108 MHz

Output level 8 carriers combined: 105 - 120 dB μ V

Output level adjustment step size (GUI): 0.1 dB

Output connector: F-type female

Output impedance: 75 ohm

Return loss: 18 dB

Channel separation L/R: > 46 dB

Carrier to spurious: > 60dB

RDS insertion: UECP SPB490 or static

MPX OUTPUT

MPX Test output level: 0 dBu

MPX Test output load impedance: 600ohm

MPX Test output connector: 1 BNC, service selectable from GUI

5A.14 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 card: 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

5A.15 IPTV HEADEND: VIDEO & AUDIO MONITORING

VIDEO OUTPUT

Connector: BNC female, 75Ω
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

5A.16 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.





5B. IPTV MIDDLEWARE. REF. Z0101007



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.

OPTIONS

If desired, it's also possible to add different ITV functionalities as: VOD, MOD, Internet, News, Radio channels, Mailbox service or television recordings (PVR).

SOLUTIONS

A Management Application is provided to enable the system administrator manage the available services: change the information that appears on the system, get information of use and other statistical information, like related to the number of views of each TV recording on the system, modify the TV channels available on the network, enable or disable the TV channels and the recordings for each user.

The operations made by the user through the Middleware interface can be integrated with the most common and important PMS and also with other external systems like domotic and alarm systems. Also, there is always the possibility to make the integration with other external systems, independently of the interface (SOAP, DB, NFS, etc.)

FEATURES

SERVICES

IPTV	Distribution of digital terrestrial, digital satellite and analogical television channels in IP.
Recordings	PVR functionalities. (Ref. Z0102003)
Video Club	Film catalogue with the latest releases and contents from the top studios classified in various genres. (Ref. Z0102004)
Music	Selection of music contents classified in various genres. (Ref. Z0102005)
Internet	Access to predefined links and netsurfing on the TV. (Ref. Z0102006)
News	Access to on-line news and information channels. (Ref. Z0102007)
Mailbox	Messages sending and reception through the TV. (Ref. Z0102008)
Radio	Distribution of radio channels in IP. (Ref. Z0102018)

MANAGEMENT APPLICATION

Format	Web Application
Management	The provided services can be managed through the Management Application

EXTERNAL INTERFACES

PMS	Fidelio, Opera, WINHOTEL, Prestige, and others
Other	Domotics, Alarm Systems...

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
Drive bays	DVD-R/+RW
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	10
IEEE-1394a interface	2 x 1 GB DDR2 800 MHz SDRAM
Diskette drive interface	1
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	10° C to 35° C (50° F to 95° 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	-40° C to 65° C (-40° F to 149° 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.

5C.1. ITV MIDDLEWARE. REF. Z0101003



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 but it's specifically designed for very small size projects (limited to 50 users).

ITV

Through this Web based middleware, the final user can access to all the services provided: VOD contents, he can listen to music, netsurfing through the Internet on the TV or access to his bill.

OPTIONS

If desired, it's also possible to add more ITV functionalities as: News, Mailbox service, accessing to the IPTV and Radio channels or having TV records (PVR).

SERVICES

Video club, music, internet and billing.

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, modify the TV channels available on the network, enable or disable the TV channels and the VOD content for each user, check the client's bill, etc.

The operations made by the user through the Middleware interface are integrated with the most common and important PMS and also with other external systems like domotic and alarm systems. Also, there is always the possibility to make the integration with other external systems, independently of the interface (SOAP, DB, NFS, etc.)

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
Billing	Access to detailed and updated billing
IPTV	Distribution of digital terrestrial, digital satellite and analogical television channels in IP (Ref. Z0102002)
Recordings	PVR functionalities (Ref. Z0102003)
News	Access to on-line news and information channels (Ref. Z0102007)
Mailbox	Messages sending and reception through the TV (Ref. Z0102008)
Radio	Distribution of radio channels in IP. (Ref. Z0102018)

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
Other	Domotics, Alarm Systems...

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
Drive bays	DVD-R/+RW
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	10
IEEE-1394a interface	2 x 1 GB DDR2 800 MHz SDRAM
Diskette drive interface	1
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	10° C to 35° C (50° F to 95° 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	-40° C to 65° C (-40° F to 149° 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.

5C.2. ITV MIDDLEWARE. REF. Z0101002



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 system, 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.

OPTIONS

If desired, it's also possible to add fonctionnalites for accessing to the IPTV channels, to the radio channels or for having TV records (PVR).

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 and also with other external systems like home automation and alarm systems. Also, there is always the possibility to make the integration with other external systems, independently of the interface (SOAP, DB, NFS, etc.)

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. (Ref. Z0102002)
Recordings	PVR functionalities. (Ref. Z0102003)
Radio	Distribution of radio channels in IP. (Ref. Z0102018)

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.
Other	Domotics, Alarm Systems...

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
Drive bays	DVD-R/+RW
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	10
IEEE-1394a interface	2 x 1 GB DDR2 800 MHz SDRAM
Diskette drive interface	1
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	10° C to 35° C (50° F to 95° 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	-40° C to 65° C (-40° F to 149° 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.

5D. EPG GENERATOR. REF. Z0101005



EPG GENERATOR

This element of the system adds all the information received from terrestrial and satellite television channels, performing a translation of formats and the distribution of information services for the reception and interpretation by the end user device. The information generated by the EPG Generator is then used in the STB for screen presentation of all information.

FEATURES

MEDIA

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

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

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
Drive bays	DVD-R/+RW
Network interface card	1 internal and 2 network cards

LAN SUPPORT

Mother Board	Gigabit (10/100/1000 Mbps/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	10
IEEE-1394a interface	2 x 1 GB DDR2 800 MHz SDRAM
Diskette drive interface	1
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	10° C to 35° C (50° F to 95° 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	-40° C to 65° C (-40° F to 149° 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.

5E. MOSAIC GENERATOR. REF. Z0101010



MOSAIC GENERATOR

This device integrates a number of input channels into a single output channel including all information from each channel entering the system in the form of mosaic. It is very useful to facilitate the use of the system to end users and to improve the quality of services offered in the IP network.

FEATURES

PERFORMANCE

Processor	Quad Core Opteron™ 2352; 2.1GHz
HyperTransport	1GHz HyperTransport™ Technology
Cache	2x1MB L2
Chipset	Broadcom HT-2100 and HT-1000 server I/O controllers
Memory	4GB DDR2 667MHz SDRAM (2x2GB single rank DIMMs)

EXPANDABILITY

I/O slots	One PCI Express™ x8 full height, half length
Drive controller	Embedded SATA II controller
Drive bays	1 x slimline bay: 24x IDE CD-RW/DVD Combo Drive
Internal storage	250 GB
Hard drives	7.2K RPM Serial ATA 3Gbps 3.5-in Cabled Hard Drive
Network interface card	Dual embedded Broadcom Gigabit2 NICs with load balancing and fail-over support
Power Supply	Standard 600W power supply; Auto-switching universal 90-264V
Availability	ECC, SDDC DDR2 memory; RAID controller option, Quad Pack LED

GRAPHICS

Video	Embedded ATI ES1000 with 16MB of dedicated DDR memory operating at 200 MHz
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MANAGEMENT

Remote management	Standard Baseboard Management Controller with IPMI 2.0 support
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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
Front	2 x USB 2.0 ports, 1 x video connector

ENVIRONMENTAL

Operating Temperature	10° C to 35° C (50° F to 95° 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	-40° C to 65° C (-40° F to 149° 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

5F.1. VOD SERVER 20 STREAMS. REF. Z0101001



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 and Time Shifting. 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 and Time Shifting 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, 12x, 16x, 48x

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
Drive bays	DVD-R/+RW
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	10
IEEE-1394a interface	2 x 1 GB DDR2 800 MHz SDRAM
Diskette drive interface	1
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	10° C to 35° C (50° F to 95° 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	-40° C to 65° C (-40° F to 149° 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.

5F.2. VOD SERVER 95 STREAMS. REF. Z0101006



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 Time Shifting. 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, 12x, 16x, 48x

PERFORMANCE

Processor	Quad Core Opteron™ 2352; 2.1GHz
HyperTransport	1GHz HyperTransport™ Technology
Cache	2x1MB L2
Chipset	Broadcom HT-2100 and HT-1000 server I/O controllers
Memory	4GB DDR2 667MHz SDRAM (2x2GB single rank DIMMs)

EXPANDABILITY

I/O slots	One PCI Express™ x8 full height, half length
Drive controller	Embedded SATA II controller
RAID controller	SAS 5/iR Controller Card for SATA and SAS HDs
Drive bays	1 x slimline bay; 24x IDE CD-RW/DVD Combo Drive
Internal storage	600 GB
Hard drives	2 x [3.5" SAS (15K rpm); 300 GB]
Network interface card	Dual embedded Broadcom Gigabit2 NICs with load balancing and fail-over support
Power Supply	Standard 600W power supply; Auto-switching universal 90-264V
Availability	ECC, SDDC DDR2 memory; RAID controller option, Quad Pack LED

GRAPHICS

Video	Embedded ATI ES1000 with 16MB of dedicated DDR memory operating at 200 MHz
-------	--

MANAGEMENT

Remote management	Standard Baseboard Management Controller with IPMI 2.0 support
-------------------	--

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
Front	2 x USB 2.0 ports, 1 x video connector

ENVIRONMENTAL

Operating Temperature	10° C to 35° C (50° F to 95° 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	-40° C to 65° C (-40° F to 149° F)
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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.

5G. ENCODERS/TRANSCODERS. REF. Z0101006



MPEG-2 ENCODER AND DVB RE-MULTIPLEXER

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.

FEATURES

- SDI with 1 AES embedded, S-Video, Composite PAL/SECAM/NTSC
- Analogue video input
- MPEG-2 MP@ML video encoding 1.5Mbps-10Mbps
- MPEG-1 Layer1 and Layer2 audio encoding
- Built-in Re-Multiplexer with 1 ASI input and ASI output
- Built-in streamer Unicast and Multicast output with a maximum of 6 streams
- PAT, PMT generation
- NIT and SDT insertion
- HDMS remote control system
- User-friendly operation menu

SPECIFICATIONS

MPEG-2 VIDEO/AUDIO ENCODER VIDEO INPUT AND COMPRESSION

Input	SDI+AES input, composite video and S-Video
Video Format	PAL/SECAM/NTSC
Compression Format	MPEG-1 (ISO/IEC11172-2) MPEG-2 MP@ML encoding (ISO/IEC13818-2) (1.5Mbps-10Mbps)
Resolution	Full D1, Half D1, SIF, QSIF

Audio Input and Compression

Compression Format	MPEG1 Layer1, Layer2 arithmetic compression
Signal Sampling	Rate 32K, 44.1K, 48K
Compression Rate	32,64, 128, 192,256,384Kbps

Internal encoder Output (inner)

Output	Single Program Transport Stream (SPTS) (inner)
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MPEG-2 BASED TRANSPORT STREAM MULTIPLEXER

DVB-ASI Serial Data Input

Interface	75 ohm BNC female
Data Transmission	Rate 270Mbps
Data Format	Byte Mode
Packet Length	188/204 Bytes
Signal Level	800mV

DVB-ASI Serial Data Output

Interface	75BNC female
Data Transmission Rate	270Mbps
Data Format	Byte Mode
Packet Length	188/204 Bytes
Signal Level	800mV
Bit Rate	24Mbps-67Mbps adjustable
Control	24×2 character LCD display control state Standard RS232 interface HDMS via 100base-T Ethernet Interface

GENERAL

Operating Temperature	0°C to 40°C
Storage Temperature	-20°C to 70°C
Humidity	85%
Power Supply	AC 90-260V,50Hz/60Hz,15W

IP UDP DATA OUTPUT

Interface	RJ45
Data Transmission Rate	10/100 Mb/s
Packet Length	188/204 Bytes
Multicast or Unicast	6 streams with selected channels.

CHASSIS

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

ENVIRONMENTAL

Operating Temperature	10° C to 35° C (50° F to 95° 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	-40° C to 65° C (-40° F to 149° 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.

5H.1. ITV MANAGEMENT TOOL



The system has an administration tool, which 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

This tool allows for the management of the system's music library. It allows it to be viewed, and the editing of the title, artist and genre details for each song, and the updating and loading of contents on the main server.



PRESS

In this section a list with all the available newspapers in the system, we'll appear. Just the selected ones will be available for the users.



INTERNET LINKS

This section allows for the adding, removal or modification of the Internet links which appear in the system.



PERSONALIZABLE INTERFACE

Updating contents in the sections, 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.

5H.2A. IPTV MANAGEMENT TOOL. CHANNELS

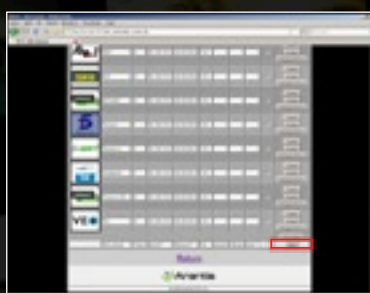


This administration tool provides all the necessary options to manage the system channels. Simplicity for using and managing takes priority.



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.

5H.2B. 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.



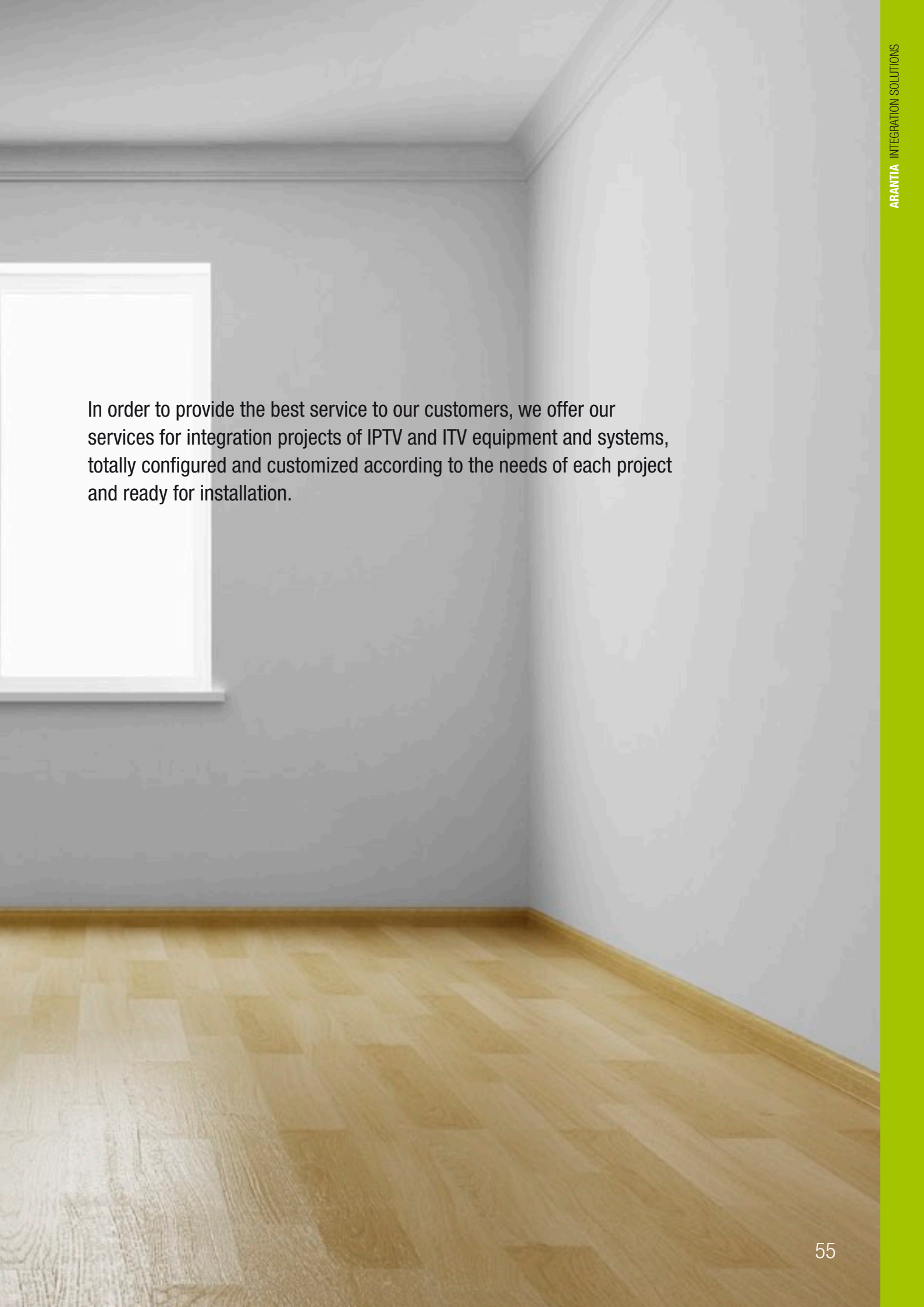
In that moment, the record will be added to the list, and the state will be Scheduled, till the start time of the record.

Every record will have the following associated information:

- Channel logo.
- Initial and final date.
- Record state.
- Snapshot (first record frame).
- Description.

5i. INTEGRATION SOLUTIONS



A photograph of an empty room with light-colored walls, a wooden floor, and a white window frame. The room is brightly lit, and the walls have a subtle texture. The floor is made of light-colored wood planks. A white window frame is visible on the left side of the image.

In order to provide the best service to our customers, we offer our services for integration projects of IPTV and ITV equipment and systems, totally configured and customized according to the needs of each project and ready for installation.

6. DIGITAL HOSPITAL

Arantia offers a digital platform for the provision of comprehensive entertainment, information and communications services. Developed to meet the demand and needs of healthcare professionals and patients. A tool for improving patient satisfaction, reducing the workload of healthcare workers and increasing the efficiency of health centre operating processes.



BENEFITS

For the patient:

Increased satisfaction. Improvement of quality of life and personal autonomy through new entertainment, information and communications services. Easy access to healthcare resources and communication with relatives.

For healthcare workers:

Safe access to hospital information and to patients' electronic records in an integrated and global way. Efficiency of internal operating processes.

For hospital management:

Improvement in the quality of services for patients and in the efficiency of internal processes. New tools for hospital management and for the confidentiality and security of internal processes.

KEY FACTORS

- Global solution for digital services.
- Maximum ease of use.
- Integration of voice, video and data services in one platform.
- 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)
- IP Telephony
- Digital Radio
- Internet
- E-mail
- Videoclub
- Games
- Music
- Corporate channel
- Internal Services
- News
- Messenger service
- Information services
- Promotion & advertising
- E-shopping
- IVR & Voicemail
- Digital Medical Records Access
- Alarms and warnings
- Monitoring diets and prescriptions
- Cognitive stimulation
- Training of patients
- Remote monitoring
- Clinical services
- Integration with management and invoicing systems
- 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. There are two possibilities, one based on an STB receiver and conventional remote-controlled television set, and the other on an touch-screen smart terminal.

Distribution Network

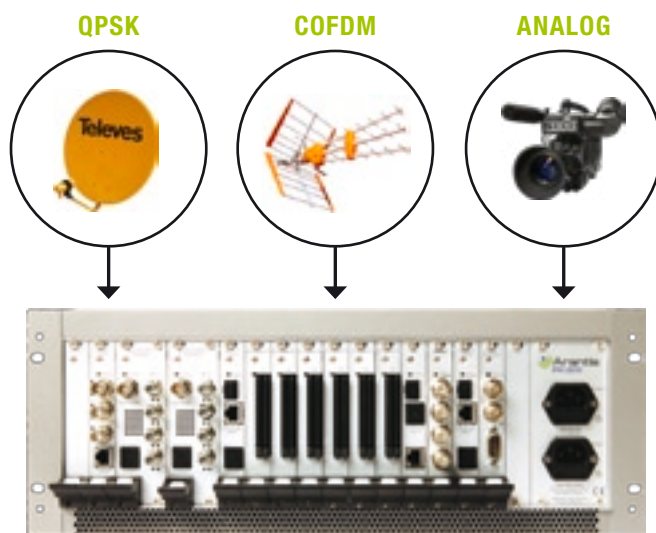
IP data network that distributes the services from the main communications rack to each patient terminal and payment terminal. It must support multicast and unicast IP management services. In some cases the distribution of conventional TV services is done through the traditional antenna network.

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.



PAYMENT TERMINAL



IPTV HEADEND



MIDDLEWARE



VOD SERVER



NETWORK MANAG. SYSTEM



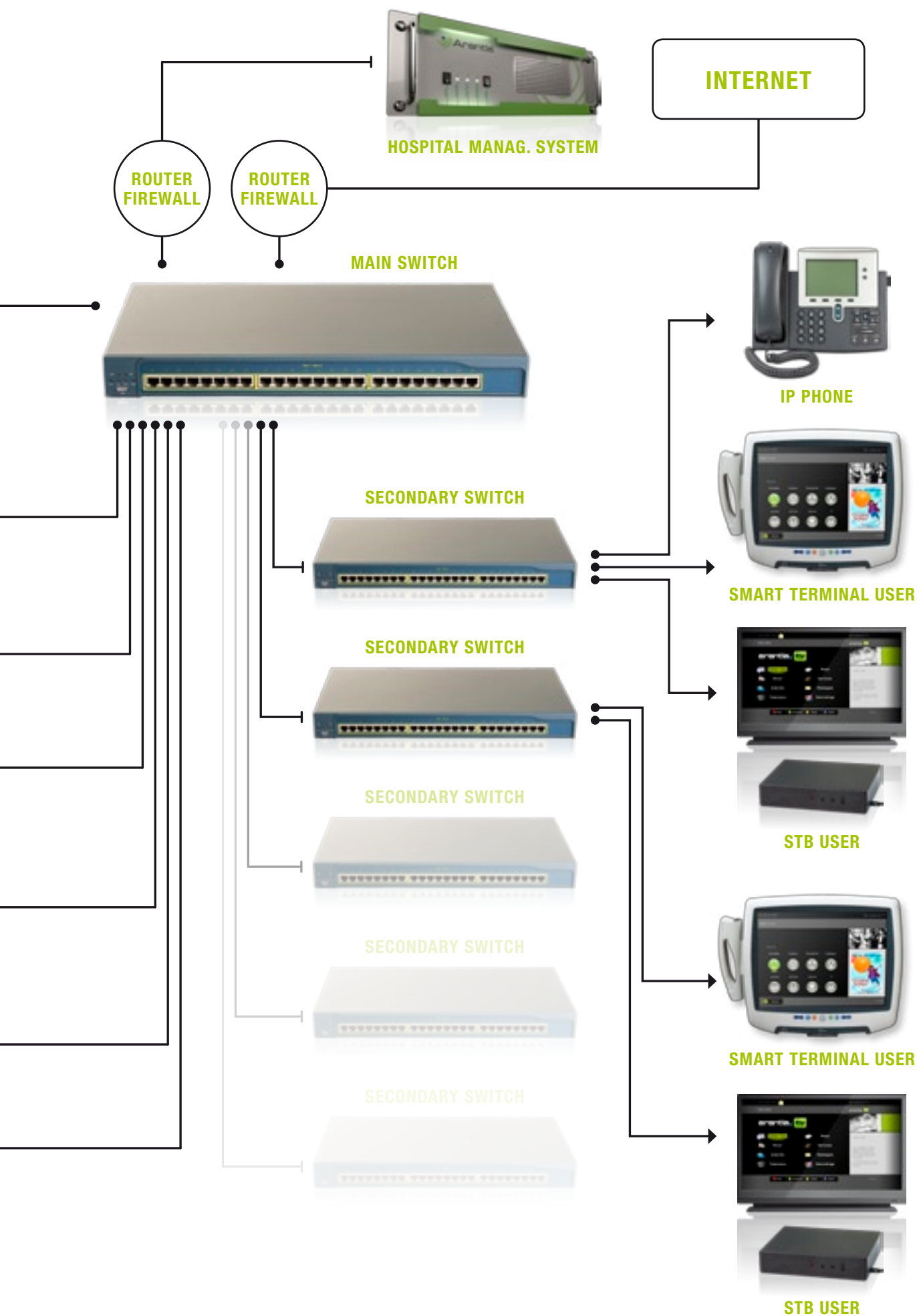
VOIP GATEWAY



PSTN



ADMINISTRATOR
CONTROL CENTER





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.

7A. DIGITAL SIGNAGE

ARANTIA DS is 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 DS THE IDEAL PARTNER FOR YOUR BUSINESS

Achieve effective and real time communication:

Arantia DS 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.

Arantia DS 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: Arantia DS 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 DS 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.

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.

7A. DIGITAL SIGNAGE

ARANTIA DS is 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 ARANTIA DS 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.

ARANTIA DS BRINGS YOUR COMPANY:

Flexibility: execute Arantia DS Manager from any desktop or laptop computer from anywhere in the world, through your web browser and independently of your operating system.

Scalability: Arantia DS provides a solution that can adapt to all kinds of needs, sizes and budgets. Arantia DS 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 Arantia DS monitoring service automatically checks the connection of all the equipment and ensures that all files have been successfully transferred.

Security: the security and integrity of your information during content transfers is guaranteed, even when carried out through the Internet, thanks to the use of the most secure encoding techniques. 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!

ARANTIA DS ALSO ENABLES YOU TO:

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

Use your network efficiently: Arantia DS Network Manager allows you to establish file transfer policies, allowing you to make better use of your network. Configure the content transfer timetable and the bandwidth that you would like to use for each location so that Arantia DS integrates with all the communication needs of your business.

Play streaming video: Arantia DS can be fully integrated with Arantia TV, so that you can use any TV channel in your presentations, either in full screen or PIP (Picture in Picture) mode in some of the predefined screens.

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 Arantia DS Network Manager, you will be able to control various centres in different locations through a simple internet connection.

The screenshot displays the Arantis web application interface. At the top, there is a navigation bar with links for Home, Services, Products, Accounts, Settings, Support, and About. Below the navigation bar, a green banner features a green checkmark icon and a message: "Your device has successfully updated and is up to date. It will be updated again when the device is ready to be updated." Below this banner, there is a "File Data" section with a form. The form contains three fields: "Name" (a dropdown menu), "Description" (a text area), and "File" (a file upload button). At the bottom of the form, there are two buttons: "Save and Add" and "Save and Close".


Arentia

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Thumbnail	Title Name	File Description
	Night View	City Night - an architectural and urban scene at night
	Early Morning	First Dawn - urban and architectural scene
	Dusk	Urban scene at dusk, architectural and urban scene
	Sunset View	The setting sun over the city skyline
	Water View	Water scene at dusk, architectural scene
	Park View	Urban scene at dusk, architectural scene
	Night	Urban scene at night, architectural scene

Search: 10 - Shopping results (1/1)


Arentia

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Arantia

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Step 5/4 - Select a template

Template	Description
	Basic template
	Advanced template
	Complex template
	Simple template
	Complex template
	Simple template
	Complex template
	Simple template
	Complex template
	Simple template
	Complex template
	Simple template
	Complex template
	Simple template
	Complex template

Ready to go? Click on the button below to start your project.

Go

The screenshot shows the Arentis web application interface. At the top, there is a header with the Arentis logo and a navigation bar with tabs: Overview, Sales, Accounts, Orders, Success, and Admin. Below the tabs is a green bar with a 'Go' button. The main content area displays a calendar view for the first quarter of 2017. The calendar shows dates and a grid of numbers, with a green highlight on January 1st. At the bottom right, there are 'Previous' and 'Next' buttons.

66



BURJ AL ARAB

Experience Burj Al Arab for 10 nights in one of our special and exclusive One Bedroom Deluxe Suite and celebrate New Year's Eve in style by joining in our world famous celebrations.

Starting with a sumptuous cocktail, you will enjoy a refined dinner in one of our renowned restaurants before watching our fabulous fireworks at midnight. You will then dance through the night to the sounds of both live and DJ music.

Prices start at AED 130,000, based on double occupancy in a one-bedroom Deluxe Suite, inclusive of breakfast, Pre-Dinner Cocktail, New Year's Eve Dinner and After Dinner Party with complimentary selected beverages.



Dubai

Wednesday
July 15 | 2009
04:37 PM



28°

130.00	-0.00	▲	0.00%	130.25	-0.03	▲	0.02%	2324.84		
131.19	-0.12	▲	0.08%	130.45	-0.23	▲	0.17%	342.84	0.005	R
1344.29	-1.21	▼	0.01%	130.59	-0.76	▼	0.57%	634.89		
1418.89	-0.17	▲	0.00%	131.59	-1.76	▲	0.21%			
156.42	-0.17	▲	0.20%	139.23	-1.52	▼	0.49%	245.31		
166.42	-0.27	▲	0.20%	139.23	-1.39	▼	0.17%	326.39		
169.94	-1.78	▲	0.45%	140.12	-1.04	▲	0.33%	421.29	0.0013	
161.19	-1.08	▼	0.59%	140.89	-1.87	▼	0.37%	3412.23		
175.94	-0.07	▲	0.30%	140.89	-1.78	▼	1.45%			
2312.94	-0.32	▼	0.01%	140.45	-1.81	▲	1.12%	346.84	0.0034	
815.23	-5.32	▲	0.10%	140.45	-0.23	▼	0.04%	825.12	1.291	R
295.28	-1.87	▲	0.40%	140.45	-0.87	▲	0.23%			
166.29	-1.78	▲	0.86%	140.19	-0.73	▲	0.55%			
161.89	-1.01	▲	0.40%	1404.29	-0.76	▲	0.45%	16.36	2.252	R
160.59	-0.25	▼	0.01%	1419.89	-0.53	▲	0.34%	193.34		
161.79	-0.87	▲	0.01%	138.89	-0.19	▼	0.25%	289.15	0.0005	
161.99	-0.23	▲	0.12%	176.42	-0.54	▼	0.07%	862.89		
165.23	-0.76	▼	0.57%	184.42	-0.83	▲	0.89%	333.59	0.0006	R
163.42	-1.78	▼	0.86%	181.19	-1.45	▲	0.21%	58.99	0.002	
161.89	-5.32	▲	0.20%	144.45	-0.72	▼	0.17%			
166.29	-1.85	▲	0.12%	134.23	-1.83	▲	0.88%	412.81	0.438	
166.99	-1.39	▲	0.88%	134.45	-0.88	▼	0.17%			
131.89	-1.34	▲	0.12%					112.89	0.889	R
1611.45	-0.12	▲	0.10%	140.44	-1.45	▲	0.12%	538.88	0.003	
168.59	-0.76	▲	0.36%	229.89	-1.23	▲	0.79%	398.79	0.542	
164.87	-0.31	▲	0.12%	2312.98	-0.67	▼	0.12%	23468.89	0.352	R
174.23	-0.82	▲	0.17%	815.23	-0.43	▲	0.17%			
161.59	-1.45	▼	0.82%	295.19	-1.85	▼	0.47%	2898.79	0.208	R
165.23	-0.32	▼	0.10%	164.29	-0.22	▲	0.12%	748.25		
815.23	-1.85	▲	0.20%	161.44	-0.89	▲	0.71%	2895.04	0.385	R
174.55	-1.84	▲	0.38%	998.54	-1.19	▲	0.07%			
178.46	-0.74	▲	0.18%	110.46	-1.54	▲	0.89%			

7A. DIGITAL SIGNAGE

TECHNOLOGY ARCHITECTURE

Arantia DS comprises the following elements:

Players

Each screen is connected to this playback equipment in order to display the contents. The player can be a specific STB or ADS player according to the needs of the project.

Arantia DS Manager

ADS Manager is the heart of the system. This contains the application for managing users, players, contents, scheduling, etc.

ADS Network Manager

Arantia DS Network Manager provides the system with a superior level of management than that provided by the Arantia DS Manager. It enables the central management of multiple locations, each one with a network of display points and an Arantia DS Manager.



FEATURES AND TECHNICAL SPECIFICATIONS

MANAGEMENT

File Management.
Content management.
Event management.
Locations management.
Screen management.
Player management.
User management.
File transfer policy management.

PLAYERS

Supported types: STBs, PCs and Totems.

REPORTS

Playback statistics.
User audit.

CONTENT CREATION

12 predefined and totally customizable templates.

Supported formats:

- Image: JPG, GIF, PNG.
- Video: AVI, FLV, MATROSKA, MOV, MPEG-1, MPEG-2, MPEG-4, H.264, WAV, VOB, DIVX, XDIV, WMV.
- Audio: AAC, AC-3, MPEG AUDIO, MP3, WMA, VORBIS – OGG, WAV.
- Text: Static text, crawls, rolls.
- RSS News.
- Weather.
- Date and time.
- HTML.
- Presentations: PPT, ODP.
- Video streaming.
- Multicast streaming: IP TV Channels, Multicast video.

Central display of contents from any PC.
Transition effects.

REMOTE LOCATION 1



ADMINISTRATION PC

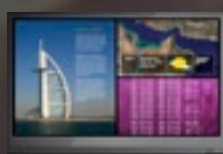


ADS MANAGER

LAN 1



ADS PLAYER



STB



TOTEM



ADMINISTRATION PC



ADS MANAGER



VOD SERVER

LAN 2



ADS PLAYER



STB



MIDDLEWARE



IPTV HEADEND

REMOTE LOCATION 2

7A.1. ADS MANAGER

DARKROOM CINEMAS

Dark Knight
© WARNER BROS ENTERTAINMENT INC.
Batman, Gordon and Harvey Dent are forced to deal with the chaos unleashed by an anarchist mastermind known only as the Joker, as it drives each of them to their limits.

Darkroom 12A

Monday	14:00	17:00	20:00	
Tuesday	14:00	17:00	20:00	
Wednesday	14:00	17:00	20:00	
Thursday	14:00	17:00	20:00	
Friday	14:00	17:00	20:00	
Saturday	12:00	17:00	20:00	22:30
Sunday	12:00	17:00	20:00	22:30

special in our popcorn

ADS REFERENCES

1. [20201001](#): ADS Manager HW&SW (25 LICENSES)
2. [20201002](#): ADS Manager HW&SW (50 LICENSES)
3. [20201003](#): ADS Manager HW&SW (100 LICENSES)
4. [20201004](#): ADS Manager HW&SW (>100 LICENSES)
5. [20205002](#): ADS Player hardware and software



FEATURES ADS MANAGER

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
Drive bays	DVD-R/+RW
Network interface card	1 internal and 2 network cards

LAN SUPPORT

Mother Board	Gigabit (10/100/1000 Mbps/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	10
IEEE-1394a interface	2 x 1 GB DDR2 800 MHz SDRAM
Diskette drive interface	1
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	10° C to 35° C (50° F to 95° 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	-40° C to 65° C (-40° F to 149° 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.

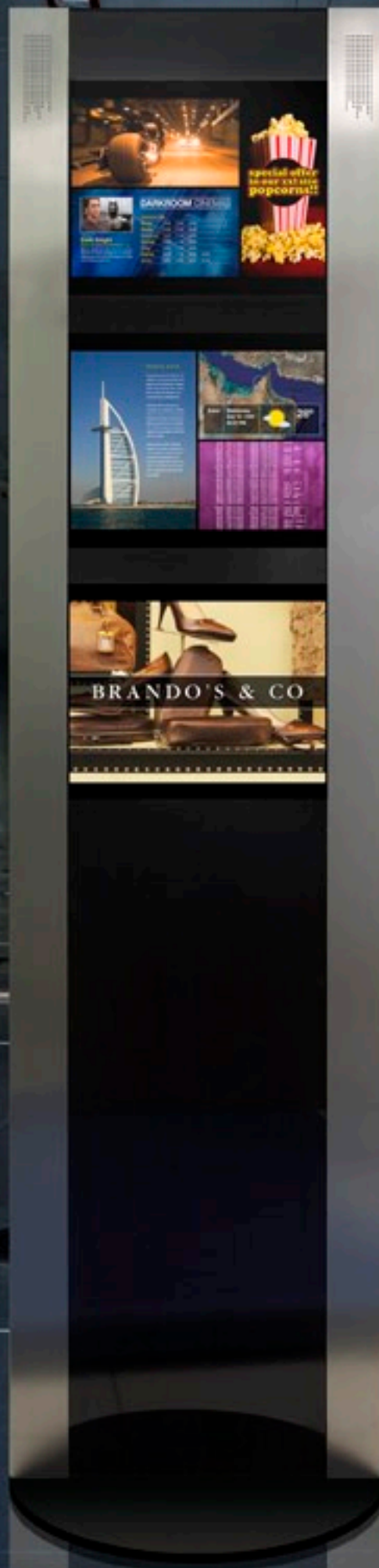
7B. TOTEM

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.



FEATURES

PHYSICAL DIMENSIONS

HEIGHT (mm)	2100
WIDTH (mm)	540
DEPTH (mm)	160
FOOT STEP (mm)	540 x 650
WEIGHT (kg)	160

POWER SUPPLY

VOLTAGE 220 AV	220 AV
POWER	3-5 A

DISPLAYS

DISPLAY TYPE	TFT LCD 19"
	16 million colours
NUMBER OF DISPLAYS	3

SOUND

SPEAKERS	120 W
----------	-------

SUPPORTED FILE FORMATS

Image:	JPG, BMP, GIF, PPT, ODP, VOB, PPS
Video:	AVI, MPEG, MPG, SWF, TS
Animation:	FLASH Web: links, websites

CONTROLLER

MOTHER BOARD	ASUS® MSN-NX SE PLUS
PROCESSOR	AMD2 Athlon™ 64 X2 Dual-Core Socket AM2 3800
MEMORY	1 x DDR2 1GB 800MHz
HARD DISK	Serial ATA2, 250GB
MEDIA	Optional

GRAPHIC CARD

MAIN (2 displays)	NVIDIA® GeForce™ Serie8 Graphics Processing Unit (GPU)
SECONDARY (2 displays)	XFX GeForce 7600 GT
AUDIO	High Definition Audio (HDA), AC'97
COMMUNICATIONS	NVIDIA Native Gigabit Ethernet / LAN 10/100/1000
OPERATING SYSTEM	LINUX

FINISH

STAINLESS STEEL	Reference: Z0206001
IRON	Reference: Z0206002

Specifications subject to change without notice.

8. DIGITAL CONTENT MANAGEMENT.

Arantia integrates into a single digital platform, all the elements needed for a global management of the entire process of generation and distribution of digital content. The IP technology developed by Arantia facilitates the distribution of digital content on any device and any type of network, using efficient tools for managing the processes including ingest, encoding, storage, metadata management, scheduling, contribution, distribution, reception and visualization.



INGEST

ENCODING &
TRANSCODING

STORAGE

METADATA

SCHEDULING



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 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
Drive bays	DVD-R/+RW
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	10
IEEE-1394a interface	2 x 1 GB DDR2 800 MHz SDRAM
Diskette drive interface	1
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	10° C to 35° C (50° F to 95° 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	-40° C to 65° C (-40° F to 149° 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

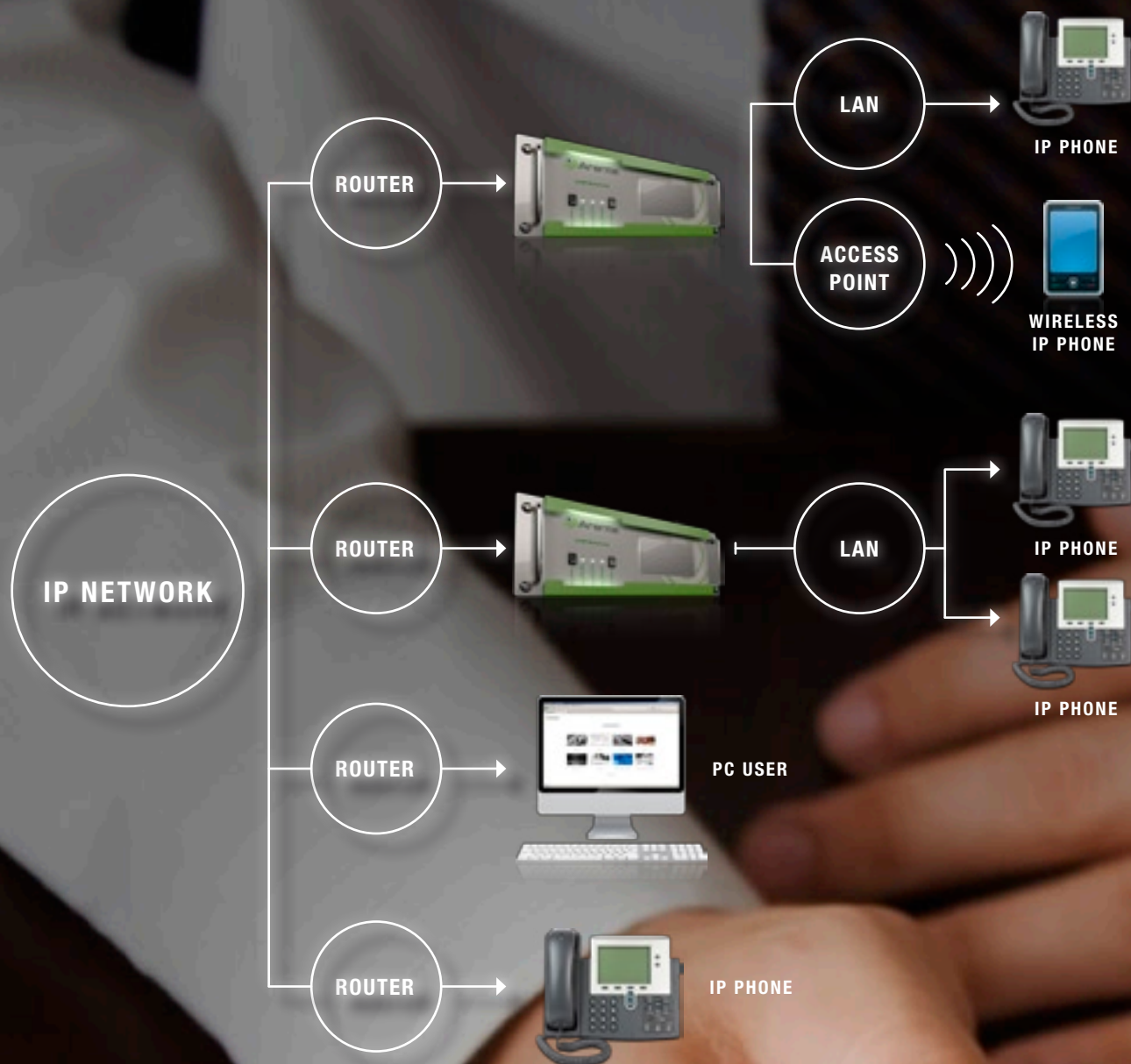
- Fax server can be managed via the Web.
- Integrated Fax viewer.
- Fax to e-mail application.
- Access control for fax clients.

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.



10. VOIP, IP TELEPHONY SOLUTIONS





FEATURES VOIP

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
Drive bays	DVD-R/+RW
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	10
IEEE-1394a interface	2 x 1 GB DDR2 800 MHz SDRAM
Diskette drive interface	1
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	10° C to 35° C (50° F to 95° 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	-40° C to 65° C (-40° F to 149° 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

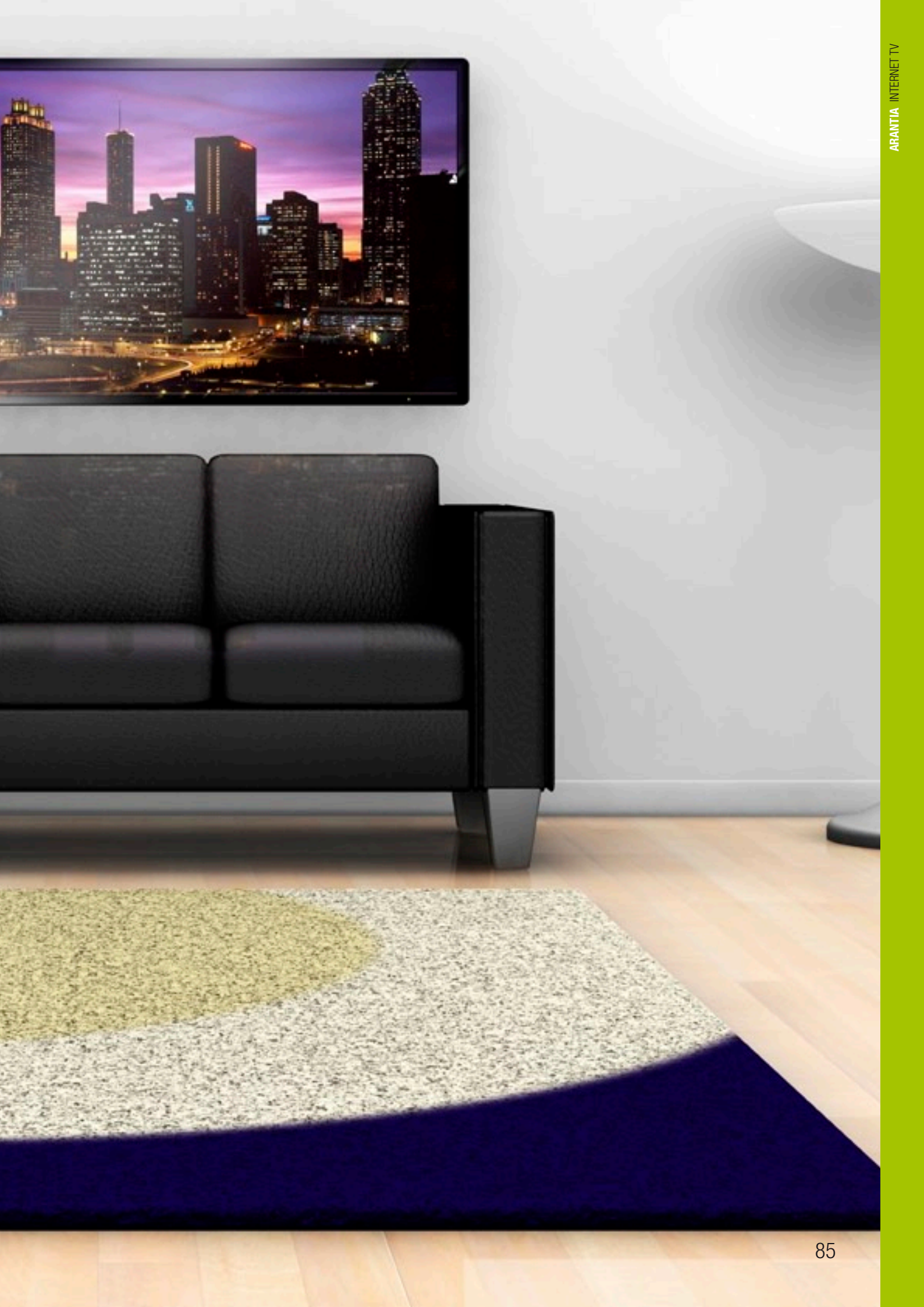
Specifications subject to change without notice.

11. INTERNET TV

Arantia offers a turnkey solution for the deployment of Internet TV services including:

- The technological platform necessary to offer live, scheduled and on-demand services.
- The tools needed for generating a media library for digital content.
- The development of a custom interface with the corporate identity of the company.
- The inclusion of advertising services and tools for their management.
- The management of bandwidth to support the development of the service in terms of growth in the number of simultaneous users.





12. 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 and to do the scheduling.
- Full control of the contents through Internet in a centralized manner.
- Contents broadcasting in alphabetical order or in loop.
- Compatible with the main video and presentation formats.
- Compatible with the main web browsers.





FEATURES CORPORATE TV

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
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Drive bays	DVD-R/+RW
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	10
IEEE-1394a interface	2 x 1 GB DDR2 800 MHz SDRAM
Diskette drive interface	1
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	10° C to 35° C (50° F to 95° 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	-40° C to 65° C (-40° F to 149° 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.







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