

Inverto is a pan-European leader in satellite equipment with market leading expertise in antenna systems, Low Noise Block converters (LNBs), broadcast reception and streaming products. Inverto-branded products are reputed for their innovative design and quality and are conceived with the intimate understanding of the services they are used for.

Inverto's broader expertise in DVB systems range from technologies such as Antenna, Feed and RF design including switching, tuning, and demodulation products to streaming software and hardware in confined, embedded environments. These unique capabilities allow for a truly holistic view on product and system design for all the product categories managed by our teams.

Over the last two decades, the Inverto team has successfully led key technological transitions and has worked closely with industry leading partners enabling successful deployments across our focus markets. Inverto operates out of Luxembourg.

Please visit our website www.inverto.tv for more information.



#### I NBs:

A supplier of choice for most DTH operators across Europe with the broadest product range in the industry covering C band, Ku and Ka bands.



#### Satellite Dish Antennas:

A newly introduced comprehensive product range of satellite dishes designed and engineered to meet the strictest performance and durability standards.



#### Set-top Boxes:

Advanced hybrid designs for retail and operators across Europe for Satellite, Terrestrial or Cable networks



#### Multiswitches:

Most optimized and field proven designs of Unicable cascadable switches



#### Professional Broadcast Equipment:

Full range of SD, HD and IPTV IRDs, encoders, multiplexers, transmodulators, CATV and SMATV systems.

Inverto provides turnkey broadcast reception, distribution and software solutions to operators, broadcasters, Set-top Box developers, and chipmakers. As an industry's RF (Radio Frequency) to software bits expert house, our solutions currently support key operators and tier-1 players across the world.



#### **HbbTV**

Hybrid broadband TV is the technology framework most widely accepted across the industry, designed to merge and enable new user experience by concurrent viewing of and interaction with broadcast and broadband television. HbbTV is a pan-European initiative aimed at harmonizing broadcast and broadband delivery of video content, incorporating support for interactivity and feature-rich broadcast and internet TV service. Inverto is one of the industry's first and best performing, proprietary browsers, that is embedded in our Inverto products and in products of key tier-1 OEM's and operators across EMEA markets and beyond.

Nuxus™ - HbbTV Stack

Nuxus is the industry's most complete HbbTV software stack, licensed with option for support of multiple Digital Rights Management engines, as well as adaptive streaming (MS Smooth streaming and Apple HLS) compliance for OTT services. Nuxus is Webkit-based HTML5 capable, broadly deployed, and intimately adapted to broadcaster specific system requirements. It optionally supports MPEG-DASH MPEG-CENC, and has been demonstrated repeatedly as the industry's fastest browser by third party tests.

#### Multi-Room / Multi-Screen

Inverto is a pioneer in SAT>IP technologies, most recently ushering the way for the design of appliances that enable secure, seamless reception and distribution of satellite TV programs to other screens across the home, typically tablets, smart phones and Smart-TV's. Inverto's software libraries for MultiScreen are used as reference servers for the design of SAT>IP compliant clients across the European markets.

#### MultiScreen™ - SAT>IP Server Firmware

Inverto's MultiScreen is the industry's first SAT-to-IP Server firmware solution, certified by key operators.

MultiScreen firmware serves operators and product developers as the referenced server for new product developments.

Inverto licenses also a certified SAT>IP client implementation to be integrated in Tablets. TVs and Set-Top-Boxes.

## OTT Middleware Empowering New Media

Over The Top (OTT) middleware: Inverto licenses an extensive OTT middleware suite that is modular (in features), client-agnostic and multi-OS (Operating System) based, serving operators and pure-OTT customers. Our OTT solution is a complete Ready-to-Go solution that integrates with DRM and other solutions, permitting an operator the design of new services cost-effectively and with optimized, fully-customizable user-experience. We support Video on Demand (VoD/MoD), Live television, radio, and pay-TV, Electronic Program Guide client and data injector, Audience and Statistics Measurement and Reporting Tools. The Middleware runs a Content Management System (CMS) that interfaces with DRM of choice of the operator, and allows for billing interfaces. Additionally, our Middleware supports third-party modules for add-on services, such as gaming, interactive content and shopping. Being fully CE-HTML based, our OTT Middleware allows for unique User Interface over mobile devices, TV sets, and Set Top Boxes. Inverto's solution is well-accepted and deployed by increasing number of customers, and is one of the most scalable and secure alternatives for OTT systems today.

#### **Software Stacks**

Invertolic enses outfull and library baseds of tware for Set-top Box, as well as for managed Over The Top (OTT)-servers and application portals.

## Secure DVB Hybrid Engine

Inverto's Secure DVB Hybrid Engine is operator-certified and complete. We license this technology on the basis of a customer-specific requirement. The secured DVB Hybrid engine has passed successfully major CA vendor certification, and supports adaptive streaming and multiple DRMs.

## Multi-Band, Multi-Beam Satellite Reception

Inverto is a leader in broadcast satellite reception. Our solutions enable challenging next-generation multibeam and multiband business cases, by tailor-making solutions that are both technically and economically unique. We have helped many operators across the world in design and commercialization of such systems, typically involved in the very early stages of the evaluation of the projects within the operator or broadcaster. Inverto is also a close partner of SES and Eutelsat, as well as other satellite operators for the design of such systems.

## Turnkey Dish to Set-top Box

Inverto is a leader in tailor-made broadcast reception solutions. We provide End to End Satellite broadcast reception systems, including dish, feed, Low Noise Block (LNB), Multiswitches and Intermediate Frequency (IF)/Protocol solutions, to specific Set-top Box requirement.

# M Z

# Our LNB families























## Essential



The Essential $^{\text{TM}}$  is our most cost affective LNB family.

- Low Phase Noise, DVB-S2 (HDTV) compliant
- Low Noise Figure
- Low power consumption
- High Cross Polarization Isolation
- High Frequency stability

The Essential<sup>™</sup> was designed for the European DTH markets, this LNB provides optimized reception capabilities. It is ready for High Definition transmissions and provides excellent Noise Figure performance. Manufactured to the highest industry quality standards, our Essential<sup>™</sup> range consists of 40mm family (Single, Twin, Quattro and Quad).











Quad 40mm LNB Item 5098 Quattro 40mm LNB Item 5099

## Extend









## The Extend<sup>™</sup> LNBs combine premium quality with best price.

- Most popular Inverto LNB range
- 100% quality controlled
- Long feed neck for optimized positioning when installed in multi-satellite reception system
- Top quality and attractive price

The Extend<sup>™</sup> range was specifically designed to address the need to support multi-LNB installations on a single dish antenna. The long neck allows greater flexibility in positioning the LNBs next to each other enabling access to satellites typically too close in their orbital position to be received with standard neck LNBs. Manufactured to the highest industry quality standards and designed to meet strict specifications, this LNB is an ideal solution for the satellite broadcast reception across Europe.



Single Long Neck 40mm LNB Item 3138



Twin Long Neck 40mm LNB Item 3207



Quad Long Neck 40mm LNB Item 3304

Quattro Long Neck 40mm LNB Item 3404

## Eco









With the Eco<sup>™</sup> series we demonstrate our responsibility and commitment to protect the environment: Over 20% energy saving compared to other conventional LNBs on the market.

- Uniquely combine top quality and highest energy efficiency
- All plastics are made from 100% recycled material
- 100% recyclable aluminum housing
- Even the packaging follows strictest environmental standards
- More than 20% power saving. Environment protection begins with small steps.

Making environmental-friendly designs are not only an attempt to set a trend but also a core element of our product design strategy. These 40mm universal 'Eco' LNBs are made from recycled materials and consume over 20% less power compared with common LNBs. This range meets the requirements of the most advanced environmental standards in Europe and sets a high standard for a new ecologically-conscious generation of LNB products.







Single Straightfeed Eco 40mm LNB Item 3136

Twin Eco 40mm LNB Item 3220 Quad Eco 40mm LNB Item 3317 Quattro Eco 40mm LNB

Item 3410

## Black Premium



LNBs of our BLACK Premium<sup>™</sup> series will satisfy even your most discerning customers.

- High performance LNBs
- 100% quality controlled
- 100% manually-selected LNBs
- Special design for optimal reception
- Premium LNB for demanding customers

The BLACK Premium<sup>™</sup> is a high-performance, high-end range of LNB products. The units are specially selected from the production line and feature an outstanding low noise figure, very low gain variation, high cross polarization and cross-talk isolation and sets new standards of quality and reliability in the industry. This stylish and compact size range of LNBs includes 40mm L-shape Single, Twin, Quattro and Quad models.







Selected Twin 40mm LNB Item 3209



Selected Quad 40mm LNB Item 3311 Selected Quattro 40mm LNB

Item 3406

## Black Ultra











## The exclusive BLACK Ultra<sup>™</sup> LNB range is for those who don't settle for less than the best.

- Outstanding High-Gain Low-Noise Figure performance
- Manufactured with high performance components
- Individually selected for best performance
- Superior reception even under difficult conditions
- Nothing but the best

The BLACK Ultra<sup>™</sup> is a high performance LNB range featuring the lowest noise figure available to address the need for superior reception at the edges of the satellite footprint skirt or difficult installation setups with long RF cable and/or a small dish size. Thanks to its novel front-end architecture and superior components, this LNB range provides higher conversion gain yet maintained with the lowest noise figure and best phase noise performance. The combination of higher grade components, excellent isolation and advanced filter design enables improved handling of interfering spurious and provides the leap in the overall reception performance compared with standard LNBs. This range includes 40mm L-Shape Single, Twin, Quattro and Quad.







Twin HGLN 40mm LNB Item 3208



Quad HGLN 40mm LNB Item 3310 Quattro HGLN 40mm LNB Item 3405

## Multi













# The $Multi^{TM}$ series LNBs are ideal, due to their slim feed design, for multi-satellite reception using a single universal dish antenna.

- Latest slim feed technology, allowing reception of two satellites with 2° spacing
- Optimal reception, even if the LNB is not in the focal point
- Patented multi-feed bracket and fixation system ensuring optimal positioning
- 100% HDTV compatible

This range offers a quick, easy and flexible installation solution for installation scenarios involving multiple LNBs, using your existing dish or any other universal offset dish antenna. Its unique design incorporates advanced dielectric materials that enable a very slim feed design to facilitate installation of the LNBs with a minimum angle of 2° and a maximum one of 30° (depending on the dish size). The Multi™ LNBs include a unique patented fixation system that is supplied through several types of installation kits to suit various and most common installation scenarios. Alternatively, these LNBs can be installed using their 23mm neck. Models in the range include Single, Twin, Quattro and Quad.



Dielectric Single 23mm LNB\* Item 3625



Dielectric Twin 23mm LNB\* Item 3626



Dielectric Quad 23mm LNB\* Item 3627

Dielectric Quattro 23mm LNB\* Item 3628



## Mono













## The Mono<sup>TM</sup> series LNBs are optimized for the reception of satellite TV from two up to three different satellites

- With 3° spacing, available as Single, Twin or Quad LNBs for 80cm dish antennas
- With 4° spacing, available as Single LNB for 80cm dish antennas
- With 4.3° spacing, available as Twin or Quad LNBs for 60cm dish antennas
- With 4.3° spacing, available as Single. Twin or Ouad LNBs for 80cm dish antennas
- With 6° spacing, available as Single, Twin and Quad LNBs for 80cm dish antennas

The Mono™ LNB range specifically addresses the DTH markets in Europe and designed to provide optimized characteristics for dual satellite reception. Depending on the size of the dish, 60cm or 80cm diameter, there is the perfectly matched Mono<sup>™</sup> LNB. For optimal reception of two satellites across Europe, the feeds of the Mono<sup>™</sup> LNBs are available with 3°. 4°. 4.3° and 6° spacing. All LNBs are fully compatible with HDTV broadcasts and will exhibit excellent noise figure and high cross-satellite isolation. Despite their extremely compact design, all Mono<sup>™</sup> LNBs offer very low noise figures, a very high cross-polarization isolation, outstanding frequency stability and very low phase noise.



Single Monoblock 60mm 3° for 80cm dish Item 3538



Twin Monoblock 23mm 4.3° for 60cm dish Item 3529



Quad Monoblock 23mm LNB ,4.3° for 80cm dish Item 3531

# **Mono Triple**



















Quad Triple-feed Monoblock 23mm LNB, 19.2°E, 23.5°E, 28.2°E for 65cm dish Item 5064





Twin Quad-feed LNB for 9°E, 13°E, 19.2°E and 23.5°E, for 80cm dish Item 5094

## Ka











The pioneering Ka<sup>™</sup> series LNB line was designed to enable reception of the new high bandwidth satellite TV, radio and data services in Ka band that are being launched across the European and MENA markets.

- Pioneering LNBF for reception of satellite services over Ka band
- High Frequency and Gain stability
- Low Phase Noise
- Low Noise Figure
- Low power consumption
- High Cross-Pole performance

This Twin Ka Circular dual polarity LNB was specifically engineered to meet the reception requirements of Eutelsat for its KA-SAT satellite located on 9° East (e.g. Saorsat – Reception of free Irish TV by Satellite). The LNB features two IF outputs and supports connection to two different satellite receivers. The LNB was designed to be used with standard offset antennas of 60-90cm diameter and F/D or 0.6. The feed of this Twin LNB is designed to fit as close as 4 degrees to a allow reception from another satellite over the same dish in Europe The external diameter of the feed is about 23mm and it is supplied with 40mm ring adapter to ensure compatibility with standard dish antennas.



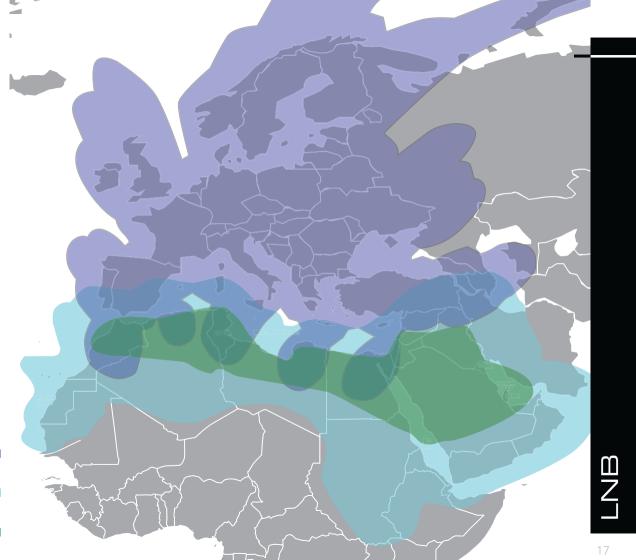
Twin Ka Circular Dual polarity LNB 23mm 9.7-20-2GHz (LO21.20 GHz) Item 3902



Single Ka Circular Dual polarity LNB 23mm 21.4-22.0GHz (LO20.45 GHz) Item 5030



KaKu Co-locate Linear 23mm LNB with one KaKu switchable output and one Ka output Item 5104



9°E Ka Footprint

25.5°E Ka Footprint

7°W Ka Footprintt

## Pro















## The Pro<sup>™</sup> series meets customers' most unusual requirements.

- The Octo LNB can serve up to eight receivers, directly connected without the need for additional multiswitches
- The Quad Terrestrial LNB enables integration and distribution of DVB-T signals over your existing network
- The ASTRA2Connect Quad LNB, specifically designed for the ASTRA2Connect service, offers optimal conditions to receive more satellite TV programs in parallel to broadband internet services.

The Pro<sup>™</sup> LNB series, demonstrates Inverto's in-depth technical expertise, keenness and commitment to provide satellite reception solutions even to the most unusual demands and needs of its customers. The ASTRA2Connect service enables access to broadband mm23 Internet in rural areas and areas that are beyond the reach of terrestrial broadband services (e.g. ADSL or Cable).

This new - easy to install - Quad LNB can feed up to four set top boxes. It uses a special circuit that filters and suppresses interferences to the received satellite TV signal caused by the simultaneous internet connection. All  $Pro^{TM}$  LNBs are excellent for the reception of HDTV broadcasts and will exhibit excellent noise figure values.



Quad 23mm ASTRA2Connect LNB with 14GHz filter for 80cm dish Item 3308



Quad Terrestrial 40mm LNB Item 3309



8 Output 40mm LNB Item 3001



Single Flange LNB Item 5046



Single C-Band Circular LNB with scalar ring Item 3124

Single C-Band Linear LNB with scalar ring Item 3125



Twin C-Band Circular LNB with scalar ring Item 3206

Twin C-Band Linear LNB with scalar ring Item 3216



Single C-Band Flange LNB Item 3126



Twin Full-Band Circular 40mm LNB Item 3219



Quad High-Band Circular 40mm LNB (LO10.75 Ghz) Item 3315

## Unicable LNBs









## Unicable<sup>™</sup> LNBs - Award-winning range of innovative, high performance, single cable LNBs

- Connect up to four receivers over one coax RF cable from the rooftop to your home
- Legacy ports allowing to connect receivers that do not support Unicable<sup>™</sup> LNBs
- Innovative, award-winning designs
- 100% HDTV compatible

Enabling the connection of up to four receivers or two receivers and one dual-tuner PVR, over a single cable, the Unicable<sup>™</sup> LNB models support different connection possibilities - use the LNB's legacy ports to connect up to two receivers that do not support the Single Cable Distribution standard (EN50494). All Inverto Unicable<sup>™</sup> LNBs are 100% HDTV compatible.

#### Unicable<sup>™</sup> accessories:

2-way splitter: Splits the signal at a central location and draws separate cables to each Set-top Box instead of

looping through the receivers with one long cable.

Power inserter: Ideal solution for long cable installations where DC voltage level at the LNB input drops too

low or when connecting Set-top Boxes having a limited power supplied to the LNB.







Unicable Quad 40mm LNB, 1 Legacy Item 3012

Unicable Quad 40mm LNB, 2 Legacy Item 3014

Unicable LNB with two identical 5UB outputs, 1 Legacy Item 5140

Unicable Quad Monoblock 23mm LNB 4.3° for 60cm dish Item 3011

## Unicable Multiswitch

A complete range of Unicable<sup>™</sup> multiswitches addressing a wide range of installation types and system requirements, with or without legacy port, with or without DVB-T injection.

- Multiswitches for all needs and system sizes
- Available with one or two legacy ports\*
- Cascadable, with optional DVB-T input
- 100% HDTV compatible

Depending on the needs and requirements of your installation case, the Unicable<sup>TM</sup> multiswitches offer various types of interfaces allowing to distribute a combined DVB-T signal or to support your old digital satellite receivers which do not support Unicable. These 'legacy' receivers are connected with a separate coaxial cable over the legacy port of your Unicable<sup>TM</sup> multiswitch

All Unicable<sup>TM</sup> multiswitches are cascadable and can integrate within a wide range of installation scenarios - from a condominium to individual houses or to apartment buildings with up to 120 outlets. Some of the Unicable<sup>TM</sup> multiswitch models addressing simpler installation scenarios can be powered by the connected receivers without the need for external power adaptor.



Unicable cascadable switch with 4 User Bands Terrestrial input and 1 Legacy port Item 5049



Unicable cascadable switch with 8 User Bands Terrestrial input and 1 Legacy port Item 5050



Dual Satellite cascadable Unicable switch with Terrestrial signal input combined over 8-User Band unicable and 1 legacy ports Item 5147

<sup>\*</sup> Connection for receivers that do not support the Single Cable Distribution standard (EN50494)

## Unicable<sup>™</sup> technology - applicable installation scenarios:

The Unicable<sup>™</sup> solution supports a variety of different installation options:

- Connect multiple receivers over one cable up to 4 using a Unicable LNB and up to 8 using a Unicable multiswitch.
- Unicable<sup>™</sup> multiswitch products can be quickly and easily deployed and integrate with existing installations of complex apartment buildings.

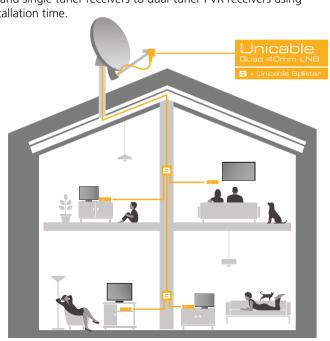
■ Ideal for upgrading analog satellite systems to digital and single tuner receivers to dual-tuner PVR receivers using existing cable and therefore significantly reducing installation time.

#### Example 1:

Common family house with an analogue cable system can be quickly upgraded to receive and enjoy the latest technology and superb viewing experience of digital satellite HDTV.

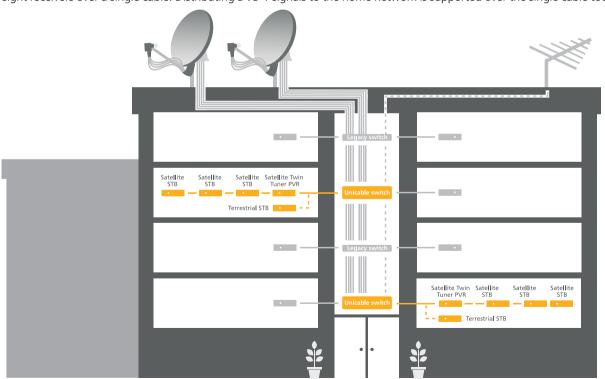
This can be implemented at minimal effort by installing a  $\mathsf{Unicable}^\mathsf{TM}$  Quad LNB and an Inverto dish.

Existing RF cables can be either looped from socket to another or re-purposed with Unicable™ splitters. Then install in every room any Unicable compatible receiver e.g. from Inverto's Volksbox connected HD+ series and welcome to the digital age. From now on you will enjoy watching television in a totally new HD quality.



#### Example 2:

The goal is to install and integrate in a large building, at minimum effort, a multi-user system. Again, this is trouble-free with the Inverto Unicable<sup>TM</sup> solution. Install one or more cascadable Unicable<sup>TM</sup> multiswitches each enabling the connection of up to eight receivers over a single cable. Distributing DVB-T signals to the home network is supported over the single cable too.



# Unicable II<sup>™</sup> Technology









The Unicable II<sup>TM</sup> product range consists of LNB and multiswitch products supporting up to 32 user bands based on digital channel stacking technologies. It is an evolutionary extension to the original Unicable family of products that is based on analog channel stacking solutions and support up to 8 user bands.

The need for a larger number of user bands over a single cable is motivated by leading DTH operators' strategies to address consumers' demand to access TV programs and content across screens and locations through the development of next generation home gateways featuring multi tuners and enabling multi screen and multi room services around subscribers' homes. Additionally, offering a larger number of user bands significantly reduces the cost and complexity of multi dwelling units (MDU) and hospitality installations as more STBs can share a single coax cabling run of a compatible LNB or multiswitch.

Unicable II<sup>™</sup> products embed best of breed digital channel stacking technologies which uses digital signal processing after wideband Analog to Digital converters to select and reorder transponder channels. The selected and reordered channels are up-converted and are stacked into L-band through Digital to Analog converters. Compared with analog channel stacking, which is based on analog frequency translation to fixed frequency slots, the digital channel stacking implementation removes the need of in-band SAW filters, offers a full flexibility of channel selection, and supports many more set top boxes through a single L-band cable at much lower cost and lower power consumption.

The Unicable II<sup>™</sup> products are backward compatible supporting the existing EN50494 standard as well as the newly introduced EN50607 standard. All certified Unicable II<sup>™</sup> will be accompanied with the following logo:





Unicable II 40mm LNB with up to 24 User bands over a single Legacy/Unicable output port



Unicable II 40mm LNB with up to 32 User bands, with a separate Legacy port



Unicable II cascadable switch with up to 24 User Bands, with Terrestrial input and 1 Legacy output port Item 5151



Unicable II cascadable switch with up to 24 User Bands with 1 Legacy port Item 5156



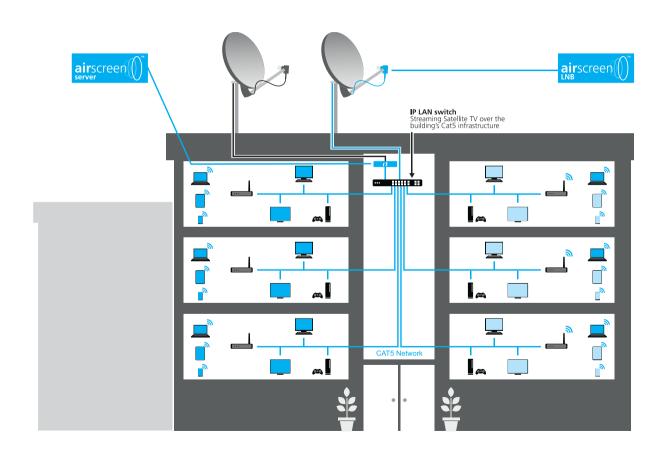
The **air**screen<sup>™</sup> product family enables to distribute live satellite content (television, radio and data) around the home. It is based on SAT>IP – a new IP-based architecture for receiving and distributing satellite signals. It and can be used over any physical network capable of carrying IP packets: ethernet cable, powerline, wireless, optical cable, etc.

In a SAT>IP environment, any IP device automatically gets enabled for satellite reception provided the right (SAT>IP compliant) software is available. Tablets, PCs, Laptops, Smartphones, Connected TVs, Game Consoles, MediaPlayers, IP STBs, etc. can all become satellite viewing clients.

In traditional satellite reception systems, RF (Radio Frequency) satellite signals are translated into IF frequency before being distributed via dedicated coaxial cables. Satellite receivers (STBs) are necessary to receive and demodulate satellite signals. With SAT>IP, satellite-delivered DVB-S/S2 RF signals are demodulated and converted towards IP right at the point of reception in a SAT>IP server. Such a conversion may happen already in the satellite antenna itself (IP-LNB), close to the antenna (SAT>IP multiswitch or converter) or in a master STB. Effectively, SAT>IP servers remove the DVB-S/S2 layer and replace it with an IP transport layer. SAT>IP makes satellite distribution physical layer agnostic as once converted to IP, satellite programs can be distributed, over any IP network. In SAT>IP environments, RF tuners and demodulators are removed from end-clients and become a common resource of the IP network where they act as servers for live satellite programs. SAT>IP clients talk to SAT>IP servers using the SAT>IP protocol and many SAT>IP servers and clients can coexist on the same network.

The **air**screen<sup>™</sup> products enable consumers to use a single home network to carry all IP based services around the house: satellite television, internet, IP telephony etc. The **air**screen<sup>™</sup> products simplify multi-room installations, seamlessly distribute high quality satellite TV, blends in with internet delivered services and importantly allow DTH operators to efficiently address and deliver their services to tablets and PCs directly over satellite.

The  $\mathbf{air}$ screen  $^{\text{TM}}$  product family consists of an ODU IP LNB ( $\mathbf{air}$ screen LNB $^{\text{TM}}$ ), in-door SAT>IP server ( $\mathbf{air}$ screen Server $^{\text{TM}}$ ) and a connected SAT>IP Client media player ( $\mathbf{air}$ screen Client $^{\text{TM}}$ ).













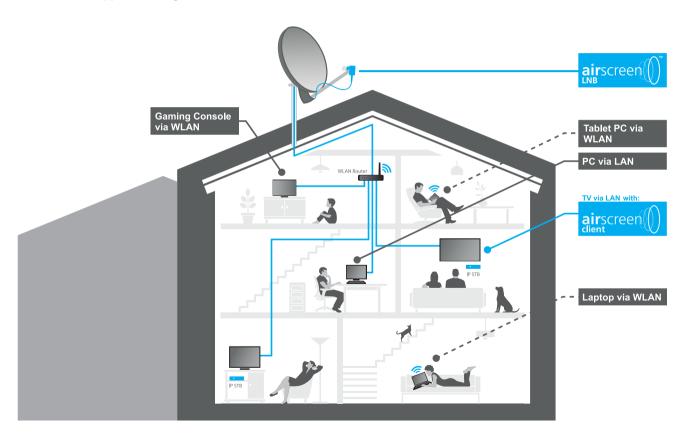
New! airscreen™ LNB delivers satellite broadcast content to TVs, tablets, smartphones and PCs connected to the home IP network

The **air**screen<sup>™</sup> LNB delivers eight concurrent channels from any of the transponders of the satellite it receives. These channels may be forwarded via IP unicast or multicast to fixed and portable devices that are connected over the home network. The satellite signals are distributed via Ethernet, power-line communications (PLC) or a Wi-Fi local area network (LAN) and can be used for free-to-air (FTA) or pay TV applications. The **air**screen<sup>™</sup> LNB digitally samples the satellite signal directly at the antenna. The satellite spectrum data and other link-quality metrics are accessible over the LAN. This greatly simplifies the dish installation and enables remote monitoring of the reception quality.

- Ku-band 10.7-12.75 GHz
- 8-channel Full-Spectrum Capture<sup>TM</sup> DVB-S2 single-chip receiver
- Broadcast to Broadband Bridge™ SoC
- Real time IP and SAT>IP streaming software stacks and protocols.
- Gigabit Ethernet LAN connectivity, Wake-on-LAN
- Power-over-Ethernet Type I, less than 10W for 8-channel operation
- Remote spectrum, temperature and PHY metrics monitoring
- SW upgradeable over Ethernet
- -40 to +65C operating temperature



## **air**screen<sup>™</sup> LNB application diagram





## SAT>IP

The **air**screen™ Server is a fully compliant and certified SAT>IP Server with 4 tuners. The **air**screen™ Server can receive up to 4 transponders and stream selected SD/HD TV & Radio programs to 4 Client devices over LAN/WLAN allowing users to watch live satellite TV on their tablets, smart phones, smart TVs, game consoles and connected video player devices with compatible software/application.

The **air**screen<sup>™</sup> Server streams out programs that were selected by the SAT>IP Clients and maintains encryption (for pay-TV channels) intact. The **air**screen<sup>™</sup> Server features a DLNA/UPnP-compatible Server mode that allows DLNA/UPnP Client devices and applications (that are not SAT>IP compatible Clients) such as DLNA-compatible TVs or Media Players to access the Live satellite TV and Radio streams over the LAN/WLAN too. DLNA/UPnP Clients access and navigate through live TV programs using a channel list provided by the **air**screen<sup>™</sup> Server. The channel list can be edited/exported/imported through the device's configuration and management menus which are accessible over a simple and intuitive web interface.





PC Clients



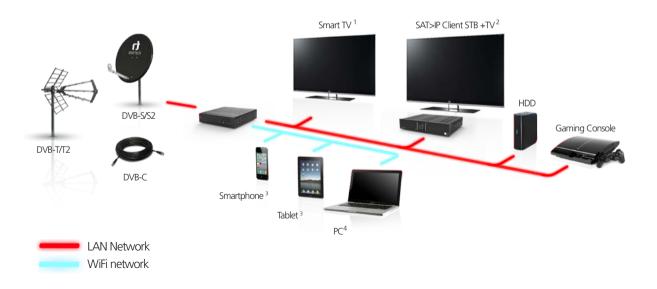


Client Apps





- 4 Tuners, Receiving Digital Cable TV and converting to IP
- Streaming Live SD/HD TV & Radio programs to 4 compatible Clients over LAN/WLAN / Powerline
- DLNA-compatible Server mode supporting DLNA Client devices and/or apps
- Multicast Server mode
- Web-based device configuration and management (password protected)
- Support MPEG2 TS and PS over IP, Unicast and Multicast
- Firmware update over USB stick or online over the internet



<sup>&</sup>lt;sup>1</sup> Smart TV with SAT>IP Client application or DLNA-compatible TV <sup>2</sup> airscreen Client STB or any other SAT>IP compliant STB

<sup>&</sup>lt;sup>3</sup> eg with Elgato SAT>IP App or DLNA Player App <sup>4</sup> eg with VLC Player or DVB Viewer software



menus which are accessible over a simple and intuitive web interface.

The Cable/Terr. TV airscreen™ Server can receive up to 4 transponders and stream selected SD/HD TV & Radio programs to 4 Client devices over LAN/WLAN or Powerline allowing users to watch live cable TV on their tablets, smart phones, smart TVs, game consoles and connected video player devices with compatible software/application. The airscreen™ Server streams out programs that were selected by the Client devices and maintains encryption (for pay-TV channels) intact. The airscreen™ Server features a DLNA/UPnP compatible Server mode that allows DLNA/UPnP Client devices and applications such as DLNA-compatible TVs or Media Players to access the Live Cable/Terr. TV and Radio streams over the LAN/WLAN or Powerline, too. DLNA/UPnP Clients access and navigate through live TV programs using a channel list provided by the

Further, the **air**screen™ Server features a multicast mode allowing it to be configured as an IPTV headend that can distribute selected programs as IP multicast streams through the site's LAN over its network interface.

airscreen<sup>TM</sup> Server. The channel list can be edited/exported/imported through the device's configuration and management







Inverto's **air**screen™ Client is a high performance cost-optimized IPTV/OTT STB platform that supports the latest standards in hybrid reception of broadband and broadcast transmissions (HbbTV) and features a complete networking stack to satisfy the requirements of the most advanced IPTV/OTT services. The **air**screen™ Client platform is utilizing the latest system-on-chip processor technology and embeds the industry's most performing CE-HTML and HTML5-compatible web browser.

The **air**screen™ Client STBs offer seamless reception and navigation experience between IP and DVB content, integrates with connected media devices, tablets and smart phones over home networks and supports a wide range of audio and video codecs and formats. The **air**screen™ Client platform supports progressive download (HTTP) and adaptive streaming such as HTTP Live Streaming and a wide range of DRM options such as SecureMedia, PlayReady, Verimatrix CAS/DRM and Nagra PRM fitting the widely varying deployment configurations of the IPTV/OTT market.

- High performance CPU, Optimized Webkit-based HTML5 and CE-HTML browser
- Hybrid and seamless reception of broadcast and broadband (DVB and IP), Fully HbbTV compliant
- Wide range of DRM eg Motorola Securemedia, Microsoft PlayReady, Nagravision PRM, Verimatrix CAS/DRM
- Adaptive streaming over HTTP, Progressive download, HLS
- Complete IPTV protocol suite including Multicast IGMP v3, DHCP, NTP, TCP/UDP, DNS, mDNS, SDP, HTTP, RTP, RTCP
- Support TV Portals, VOD, Catch-Up TV, Linear TV and Push-VOD for markets with limited internet connections
- Home networking connectivity, media sharing and extensive range of audio and video codecs
- TV Recording on external USB storage or shared folders and network storage devices
- 'Works with SAT>IP' supporting EPG, Channel lists, TV recording and live TV streaming from SAT-IP Servers
- Remote management, data logger, secure software upgrades







<sup>\*\*</sup>Optional Accessories: 802.11b/g/n WLAN USB dongle, up to 150Mbps, Keyboard RCU



Inverto's middleware platform manages interactive TV services and content for any size of Telco IPTV/OTT/Hospitality TV operators. It provides a cloud-based or on-site hosted TV portal and service delivery platform that is complete, scalable, universal (multiscreen) and modular in features. Inverto's middleware is a field-proven Ready-to-Go solution that integrates with various DRMs and hybrid STBs as well as other solutions, permitting operators the design of new services cost-effectively and allowing them to build multiple user interfaces quickly and easily, and to change their user experience as their services evolve. Being fully CE-HTML based, our IPTV/OTT Middleware allows for unique User Interface over mobile devices, TV sets, and Set Top Boxes. Inverto's solution is well-accepted and deployed by over 20 and increasing number of customers, and is one of the most scalable and secure alternatives for IPTV/OTT systems today

- IPTV/OTT Features
  - Live TV & Radio
  - TV channel lists, mosaic, EPG
  - Video/Music on Demand, Catch Up TV
  - Push VOD
  - nPVR and Time Shifting
  - Recommendation engine
  - Applications, Widgets, Games

## ■ Hospitality TV dedicated features:

- info channel,
- Wake-up call, bill/check out,
- Service booking ie Room service, Spa
- House keeping
- Customer satisfaction
- Digital signage

#### ■ Digital Signage dedicated features:

- Mix of live TV, text, web pages and video files
- Multi format content-flash, ppt, photos,...
- Scheduling via calendar
- Split-screens
- Display groups management
- Channel forcing



Inverto's middleware provides a complete solution permitting operators full control over their TV service offering. It allows extraction of data that helps the operators to focus their marketing effort and provide better service to their subscribers as well as to design new services cost effectively and with fully-customizable user-experience. Thanks to its rich APIs and compatibility with internet-based technologies, users benefit from advanced and unique features yet their TV watching experience remains simple and fun.

- Live HD TV free-to-view or pay-TV, broadcast or IP-based
- Video on Demand (VoD) and Push VoD— DRM protected; Connection to VoD servers, manage media offering to customers; Push VoD utilizing external HDD connected to the STB; Full trick modes playback.
- Catch-Up TV Your Catch-Up TV content, auto-generated and prepared to access by customers based on your configured business rules.
- Home streaming Use your STB to stream content from other home media devices or stream content from a connected HDD to other devices such as tablets and PCs over your home network.
- EPG connection to 3rd party online EPG services;
- PVR TV recording and playback of live TV channels over USB or home network shares; Scheduled recordings;
- Interactive TV Portal customized and branded portal providing access to interactive content, video and music services, entertainment and news applications and games; Walled garden websites.
- 2nd screen (tablets, smartphones) users can use any browser-based or a customized iOS/Android App to access the online portal and stream Live TV, VoD/MoD and Catch-Up TV content; Remote control applications for the STB.
- User profiling Users login and configurable user preferences.
- Targeted promotions Content consumption statistics helping target subscribers with relevant content and ads.
- Ad insertion displaying customizable ad sizes on the TV info banner, screen pop-ups or over the interactive TV portal.
- Audience and Statistics Measurement and Reporting Tools.





ZiBox is a high performance cost optimized hybrid HD+ receiver letting users enjoy HD+'s SmartTV web portal hosting dozens of entertainment applications and video services, Video on Demand and HD+ Replay Catch-Up TV services as well as internet browsing over the TV, robust home streaming of media and live free-to-view satellite TV to tablets, PCs and Smartphones that are connected on the home LAN.

The Zibox embeds the latest Nagravision CAS and PRM, Adaptive streaming and Microsoft PlayReady DRM technologies. The Zibox features a DLNA server enabling DLNA-compatible client devices to access TV recordings anywhere around the home.

The Zibox provides two high speed USB2.0 ports, Ethernet, HDMI and TV SCART and can connect to the internet via its Ethernet interface or a WLAN USB dongle\* The Zibox complies with the HbbTV standards allowing users in Germany to benefit from advanced interactive features provided by leading broadcasters over the internet in parallel to their TV program transmission and provide access to endless content they make available online or over the air.





L T

- HD+ SmartTV web portal, HD+ Replay Catch-Up TV and VoD services.
- Fully HbbTV compliant with Nagravision CAS and PRM
- Browse the internet with a built-in ultra fast HTML5 compliant. Webkit-based web browser
- Microsoft PlayReady DRM, Adaptive streaming over HTTP, HLS and MPEG-DASH
- Internet connection over Ethernet or WLAN USB dongle\*;
- Streaming video to DLNA and/or SAT-IP clients including smartphones and tablets.
- Media library, TV recording and playback over network shares and USB storage devices\*\*
- Codecs: MPEG2/MPEG4/H.264. MKV. AVI. XVID. WMV. VC1. WMA. AC3 Dolbv™. MP3 and JPEG
- Unique, multi-lingual and intuitive User Interface in high definition.
- TV/Radio Channel list management (LCN support). 6 favorite lists. 7-day DVB-SI-based EPG
- Software updates over the internet, over satellite (Astra 19.2°E) and USB
- Less than 1W during deep standby power mode
- Free remote control and web browsing apps for iPhone and Android-based Smartphones.
- Free HD+ smart card valid for 12 months

#### iPhone / iPad / Android app

Use your smartphone or tablet to control the Zibox and enjoy an intuitive and convenient user interface for web browsing.

#### SAT>IP server and client compliant

Streaming of live content to your Smartphone, Tablets or TV supporting the SAT>IP protocol.

#### Enjoy TV Anytime, Anywhere and on Any-Screen

The Zibox can stream live and recorded video to your Smartphone, Tablet, Smart TVs and any other DLNA and/or SAT-IP Clients.

<sup>\*</sup> Optional accessories:- HDMI cable, 802.11b/g/n WLAN USB dongle, RCU Keyboard \*\* Subject to 3rd party license.

<sup>\*\*\*</sup> Available also with Verimatrix or Irdeto embedded CAS.





The Volksbox Web Edition+ embeds Nagravision CAS and PRM and is fully compliant with HD+ requirements supporting HD+ SmartTV portal and the HD+ Replay catch-up TV services.

The Volksbox Web Edition+ connects to the internet over a built-in WiFi or Ethernet connection providing consumers with access to HD+ SmartTV portal containing a large number of attractive services covering sports, entertainment, music, information and social networks including football magazine Kicker, TV guide TV Movie, news and current affairs from Bild. de, catch-up TV from Arte and cinema news from Kino.de, YouTube, and weather forecasts to name a few. The Volksbox Web Edition+ supports the HbbTV standard and HD+ Replay allowing users to benefit from advanced interactive features and online content and access TV programs they may have missed. The Volksbox Web Edition+ is a certified SAT>IP Client, allowing users to stream live free-to-air or HD+ pay TV programs from any SAT>IP compatible Server device connected over the same home network. This provides a simple and quick multi-room deployment over the home LAN allowing access to satellite TV even when there is no satellite RF cable available in the room. The Volksbox Web Edition+ allows users to freely browse the web and have their own search for online content. There is also support for remote mouse and keyboard making web browsing easy and simple from the couch.



- Fully HD+ Compliant, supporting HD+ SmartTV portal, free internet browsing\* and the HD+ Replay catch-up TV and **VOD** services
- Full HD video resolution max. resolution 1920 x 1080p
- HbbTV support for interactive TV programs and services
- Fully SAT>IP compliant, Certified SAT>IP Client by SES, streaming live TV from SAT>IP compatible Server devices
- Media library, TV recording and playback over shared folders, network and USB storage devices\*\*
- Supporting MPEG2, MPEG4, H.264, VC1, WMV, WMA, HE-AAC, XViD, MKV, AVI, JPEG, MP3, Dolby™
- 7 days TV Guide (EPG), Favourite TV and Radio channel lists
- Stylish design with large alphanumeric display (8 characters)
- Multifeed DiSEgC and Unicable<sup>™</sup> capable
- Free remote control apps for iPhone/Android-based smartphones
- Multilingual User Interface in Full HD resolution
- DVB subtitles and Teletext
- HD+ Card 12 Months free subscription







Double Sided Remote Control With Full Keyboard

HD+ SmartTV portal

#### Inverto offers a complete range of proven video solutions for professional broadcasters.

Intended for , network operators, service providers and hospitality networks, improving video quality and efficiency in delivery. Inverto's broadcast encoders for H.264 and MPEG2 provide top video quality and bit-rate efficiency, while our widely deployed DVB IRD platforms deliver advanced stream processing for a wide range of video distribution or monitoring applications. The product line also includes advanced Transmodulators, EdgeQAM Modulators, Transcoders, Multiplexers, DVB Scramblers, Redundancy switches and TS Dividers.

Inverto's customers, including major media and communications companies, enjoy local service and support in Europe which are key to maintaining availability and profitability of their business and services.

- Simple and guick to install and operate
- Cost optimized, High performance and reliability
- Remote device management (LAN, WAN or SNMP)
- Available as 19" 1U or modules in 19" 4U rack

#### Most deployed products:

- Professional HDTV MPEG2/H.264-AVC Integrated Receiver Decoder IDLV-3100P
- Professional Multi-format SD/HD Integrated Receiver Decoder IDLV-5100P
- Professional MPEG-4 Encoder/Transcoder IDLV-5100EC
- Professional IP to QAM and multi-standard DVB receiver and trans-modulator IDLV-4100PM, IDLV-5100TM
- Professional MPEG-2 DVB TS Multiplexer IDLV-3000MX
- 6. Professional Digital Head-End System IDLH-1000 series

<sup>\*</sup> See page 45 for the complete list of our professional broadcast equipment



## Dish features



# RF performance

Our long history of leadership in RF technology research, and quality assurance that involve the strictest production line testing have enabled us to bring to market a Dish solution that combines optimal antenna geometry with advanced performance levels



#### Weather proof

Our specially developed anticorrosive coating process includes cleaning, phosphatic and polyester powder coating and rigorous tests in large scale salt mist chambers, followed by long-term field tests executed in various geographical conditions that range across the North Sea, Middle-East and the tropics. Our products are tested a conditional conditions that range across the North Sea, Middle-East and the tropics. Our products are tested as the conditions that range across the North Sea, Middle-East and the tropics. Our products are tested as the conditions that range across the North Sea, Middle-East and the tropics. Our products are tested as the conditions that range across the North Sea, Middle-East and the tropics. Our products are tested as the conditions that range across the North Sea, Middle-East and the tropics. Our products are tested as the conditions that the conditions tin specialized wind-tunnels in which they are exposed to various wind velocities from different directions and elevations



#### Mechanical design

We design our antenna dishes for ease and solidity of assembly of all the system elements in order to ensure long-term durability of the dish in the toughest conditions.



#### **Ouality**

Our satellite dish range is built to the strongest mechanical quality requirements. Automated processes and the use of precision tools ensure uniform cross-yield high quality and specification compliance of all our products.



#### Easy installation

A user-friendly product design philosophy ensures our antenna dishes are quick and easy to assemble in their first use and easily adjusted, if needed, during their life time.



#### Logistics friendly

Our customers can choose from a variety of flexible packaging solutions. Individual or bulk packaging ensures minimized transportation and handling costs



#### Customer service & Support

We at Inverto value our customers and are able to offer them our special customer and service support which has positioned us as a market leading brand for many years.



#### One-Stop-Shop solution

With our extensive range of LNBs for any installation scenario, Inverto can offer you a complete satellite reception solution with customized dish-packs for improved economy and cost-effectiveness.

## Home Pro Dishes



Inverto's satellite dish product range is an important pillar of our product portfolio which makes us a true onestop-shop for our customers and further establishes Inverto as a leader in the Satellite reception equipment market across Europe. Inverto offers three lines of satellite off-set dish antennas: HOME Pro™, BLACK Premium™ and BLACK Ultra™.

**HOME Pro**<sup> $\mathbb{T}$ </sup> - Cost optimized dish systems with 60cm, 80cm and 90cm dish sizes.

- Simple and quick to install
- Lasting quality durable parts and solid construction (max. wind 150km/h).
- Available in steel with a high quality uniform surface and anti corrosion coating
- Perfect reception quality with high gain across the band
- Bulk or single packaging



60cm Steel Ku off-set dish antenna with Easy-fix arm Item 3800



80cm Steel Ku off-set dish antenna with Easy-fix arm Item 3801



90cm Steel Ku off-set dish antenna with Easy-fix arm Item 3802



120cm Steel Ku off-set dish antenna with Easy-fix arm Item 5103

## Black Premium Dishes



## BLACK Premium<sup>™</sup> - High performance Aluminum dish systems.

- Simple and quick to install
- Lasting quality durable parts and solid construction (max. wind 150km/h).
- Available in aluminum with a high quality uniform surface and anti corrosion coating
- Perfect reception quality with high gain across the band
- Bulk or single packaging



60cm Aluminum Ku off-set dish antenna with Easy-fix arm Item 3819



80cm Aluminum Ku off-set dish antenna with Easy-fix arm Item 3820



90cm Aluminum Ku off-set dish antenna with Easy-fix arm Item 3821

## Black Ultra Dishes









#### BLACK Ultra<sup>™</sup> - high performance, heavy duty Aluminum satellite dish system

- Simple and quick to install
- Lasting heavy-duty quality durable parts and massive construction (max. wind 150km/h).
- Available in aluminum with a high quality, high precision uniform surface and anti corrosion coating
- Perfect reception quality with high gain across the band
- Bulk or single packaging

Our satellite dishes were designed to match the Inverto LNBs and provide an optimized reception system that perfectly meets the most strict requirements of leading DTH operators in Europe. In particular, the designs are easy and simple to install as well as highly robust mechanically.

Inverto dishes, manufactured with our advanced, high precision technology, continue to uphold our market leading tradition of unparalleled durability, quality and performance that has come to be associated with our brand.

All Inverto dishes undergo an extremely thorough anti-corrosive process and polyester coating to prevent long-term corrosion.

They are manufactured with advanced high precision tools to ensure durability and optimal reception performance (SDTV and HDTV/DVB-S2).



80cm Aluminum dish with double-arm Item 3835



# L Bracket Aluminum

A family of L-Brackets for the mounting of satellite dishes on horizontal and/or vertical surfaces. Made from light-weight and weather resistant Aluminum these brackets can be obtained in several height dimensions to suit various installation scenarios.



Item	Model Reference	Description	Diameter	Height	Wall dist.	Plate Size Steel
5106	IDLP-LB25O-ALUOO-OBB	L Bracket 25 Alu.	50x2	250	250 mm	150x150x5 mm
5107	IDLP-LB35O-ALUOO-OBB	L Bracket 35 Alu.	50x2	250	350 mm	150x150x5 mm
5108	IDLP-LB45O-ALUOO-OBB	L Bracket 45 Alu.	50x2	250	450 mm	150x150x5 mm

## L Bracket Welded Steel



A family of L-Brackets for the mounting of satellite dishes on horizontal and/or vertical surfaces.

Made from strong weather resistant Steel these brackets can be obtained in several height dimensions to suit various installation scenarios



Item	Model Reference	Description	Diameter	Height	Wall dist.	Plate Size Steel
5112	IDLP-LB25O-STWOO-OBB	L Bracket Welded Steel 25	42x1.5	250	250 mm	150x150x2.5 mm
5113	IDLP-LB35O-STWOO-OBB	L Bracket Welded Steel 35	42x1.5	250	350 mm	150x150x2.5 mm
5114	IDLP-LB45O-STWOO-OBB	L Bracket Welded Steel 45	42x1.5	250	450 mm	150x150x2.5 mm
5115	IDLP-LB55O-STWOO-OBB	L Bracket Welded Steel 55	42x1.5	250	550mm	150x150x2.5 mm

# L Bracket Bent Welded Steel



A family of L-Brackets for the mounting of satellite dishes on horizontal and/or vertical surfaces. Made from strong weather resistant Steel these brackets can be obtained in several height dimensions to suit various installation scenarios.



Item	Model Reference	Description	Diameter	Height	Wall dist.	Plate Size Steel
5116	IDLP-LB3OO-STBOO-OBB	L Bracket Bent Steel 30	38x1.5	250	300 mm	150x150x2.5 mm
5117	IDLP-LB4OO-STBOO-OBB	L Bracket Bent Steel 40	38x1.5	250	400 mm	150x150x2.5 mm
5118	IDLP-LB500-STB00-OBB	L Bracket Bent Steel 50	38x1.5	250	500 mm	150x150x2.5 mm

## L Bracket T-base Steel



A family of L-Brackets for the mounting of satellite dishes on horizontal and/or vertical surfaces.

Made from strong weather resistant Steel these brackets can be obtained in several height dimensions to suit various installation scenarios



Item	Model Reference	Description	Diameter	Height	Wall dist.	Plate Size Steel
5119	IDLP-LB5OO-STWOT-OBB	L Bracket T-base Steel 50	48x2	250	500 mm	300x270x4 mm
5120	IDLP-LB7OO-STWOT-OBB	L Bracket T-base Steel 70	48x2	250	700 mm	300x270x4 mm

# Balcony Bracket



A family of Balcony Brackets for the mounting of satellite dishes on vertical surfaces. Made from Steel these brackets can be obtained in several dimensions to suite various instillation scenarios.



Item	Model Reference	Description	Diameter	Height	Wall dist.	Plate Size Steel
5121	IDLP-BB25O-STL42-OBB	Balcony Bracket Steel 25	42x1.5	250	250 mm	150x150x2.5 mm
5122	IDLP-BB35O-STL42-OBB	Balcony Bracket Steel 35	42x1.5	250	350 mm	150x150x2.5 mm
5123	IDLP-BB45O-STL42-OBB	Balcony Bracket Steel 45	42x1.5	250	450 mm	150x150x2.5 mm
5124	IDLP-BB55O-STL42-OBB	Balcony Bracket Steel 55	42x1.5	250	550mm	150x150x2.5 mm

# Balcony Clip



Balcony Clips are used to support the mounting of satellite dishes in vertical surfaces.

Made from strong weather resistant Steel these brackets can be obtained in several height dimensions to suit various installation scenarios.



Item	Model Reference	Description	Diameter	Height	Wall dist.	Plate Size Steel
5125	IDLP-BB5OO-STI42-OBB	Balcony Clip Steel 50	42x1.5	500	-	100x100x4 mm
5126	IDLP-BB75O-STI42-OBB	Balcony Clip Steel 75	42x1.5	750	-	100x100x4 mm

# M Bracket Steel



A family of M brackets for the support of mounting of satellite dishes on a vertical surface. Made from strong weather resistant Steel these brackets can be obtained in several height dimensions to suit various installation scenarios.





Item	Model Reference	Description	Diameter	Height	Wall dist.	Plate Size Steel
5127	IDLP-MB100-ST000-OBB	M Bracket Steel 10cm	-	100	-	30x5mm
5128	IDLP-MB18O-STOOO-OBB	M Bracket Steel 18cm	-	180	-	30x5mm
5129	IDLP-MB28O-STOOO-OBB	M Bracket Steel 28cm	-	280	-	30x5mm
5130	IDLP-MB3OO-STOOO-OBB	M Bracket Steel 30cm	-	380	-	30x5mm
5131	IDLP-MB48O-STOOO-OBB	M Bracket Steel 48cm	-	480	-	30x5mm

# Tri-bracket Steel



The Tri-bracket is used to support the mounting of satellite dishes on a horizontal surface and is made from strong weather resistant Steel.



Item	Model Reference	Description	Diameter	Height	Wall dist.	Plate Size Steel
5132	IIDLP-PB1MO-STO15-OBB	Tri-bracket Steel 100x15cm	48x2	1000	_	150X150 mm

# Pole Bracket Steel



The Pole bracket is a family of pole mounts used for the mounting of satellite dishes on a horizontal surface. Made from strong weather resistant Steel these brackets can be obtained in several height dimensions to suit various installation scenarios.



Item	Model Reference	Description	Diameter	Height	Wall dist.	Plate Size Steel
5133	IDLP-PB85O-STO15-OBB	Pole Bracket Steel 85x15cm	48x1.5	850	-	150x150x3mm
5134	IDLP-PB85O-STO25-OBB	Pole Bracket Steel 85x20cm	48x1.5	850	-	200x200x3mm

## Lambda Bracket Steel



The Lambda bracket is a family of mounts to support the mounting of satellite dishes on a horizontal surface. Made from strong weather resistant Steel these brackets can be obtained in several height dimensions to suit various installation scenarios



Item	Model Reference	Description	Diameter	Height	Wall dist.	Plate Size Steel
5095	IDLP-DB600-ST000-OBB	Lambda Bracket Steel 70	42x1.5	700	-	-

# Patio Mount



The patio mounts is a family used to support the instillation of satellite dishes on horizontal surfaces. The range is offered in both strong weather resistant Steel or light-weight weather resistant Aluminum.



Item	Model Reference	Description	Diameter	Height	Wall dist.	Plate Size Steel
5136	IDLP-PTKOO-STOOO-OBB	Patio Mount Kit Steel	-	-	-	-
5137	IDLP-PTOOO-STOOO-OBB	Patio Mount Steel Strong	-	-	-	-
5176	IDLP-PTSOO-ALOOO-OBB	Patio Mount Steel	-	-	-	-

# H Balcony Clip Steel



The H Balcony clips are made of strong weather resistant Steel and are designed to support the mounting of a satellite dish onto any area where there are railings.



Item	Model Reference	Description	Diameter	Height	Wall dist.	Plate Size Steel
5139	IDLP-HCOOO-STOOO-OBB	H Balcony Clip Steel	-	-	-	-

# LNB Holders



LNB holder single position for 40mm feed Item 5084



Multifeed LNB holder 3 sat position for 40 mm feed Item 3624



Aluminum LNB holder single position for 40mm feed Item 3807



Multifeed LNB holder 3 sat position for 40 mm feed with dish arm adaptor Item 3623

# Product references

#### LNBs

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Esser	Essential <sup>™</sup>					
Item no.	Model	Description	Qty./Cart.			
5086	IDLE-SINL46-ESSEN-OPP	Single 40mm LNB	80			
5146	IDLE-TWNS46-ESSEN-OPP	Twin 40mm LNB	80			
5098	IDLE-QUDS46-ESSEN-OPP	Quad 40mm LNB	80			
5099	IDLE-QUTS46-ESSEN-OPP	Quattro 40mm LNB	80			
Exten	d <sup>™</sup>					
Item no.	Model	Description	Qty./Cart.			
3138	IDLR-SINL42-EXTND-OPP	Single Long Neck 40mm LNB	40			
3207	IDLR-TWNL40-EXTND-OPP	Twin Long Neck 40mm LNB	30			
3304	IDLR-QUDL40-EXTND-OPP	Quad Long Neck 40mm LNB	40			
3404	IDLR-QUTL40-EXTND-OPP	Quattro Long Neck 40mm LNB	40			
Eco™						
Item no.	Model	Description	Qty./Cart.			
3136	IDLB-SINS41-OOECO-OPP	Single straight-feed Eco 40mm LNB	75			
3220	IDLB-TWNL40-OOECO-OPP	Twin Eco 40mm LNB	30			
3317	IDLB-QUDL40-OOECO-OPP	Quad Eco 40mm LNB	40			
3410	IDLB-QUTL40-OOECO-OPP	Quattro Eco 40mm LNB	40			

BI AC	CK Premium <sup>™</sup>		
Item no.	Model	Description	Qty./Cart.
3139	IDLB-SINL41-PREMU-OPP	Selected Single 40mm LNB	80
3209	IDLB-TWNL40-PREMU-OPP	Selected Twin 40mm LNB	30
3311	IDLB-QUDL40-PREMU-OPP	Selected Quad 40mm LNB	40
3406	IDLB-QUTL40-PREMU-OPP	Selected Quattro 40mm LNB	40
BLAC	CK Ultra <sup>™</sup>		
Item no.	Model	Description	Qty./Cart.
3116	IDLB-SINL40-ULTRA-OPP	Single HGLN 40mm LNB	30
3208	IDLB-TWNL40-ULTRA-OPP	Twin HGLN 40mm LNB	30
3310	IDLB-QUDL40-ULTRA-OPP	Quad HGLN 40mm LNB	30
3405	IDLB-QUTL40-ULTRA-OPP	Quattro HGLN 40mm LNB	30
Multi	rm		
Item no.	Model	Description	Qty./Cart.
3625	IDLB-SINL24-MULTI-OPP	Dielectric Single 23mm LNB	30
3626	IDLB-TWNL24-MULTI-OPP	Dielectric Twin 23mm LNB	30
3621	IDLB-TWNL20-H1070-APP	Dielectric Twin High-Band 23mm LNB no PL (LO 1070 for Au)	30
3627	IDLB-QUDL24-MULTI-OPP	Dielectric Quad 23mm LNB	20
3628	IDLB-QUTL24-MULTI-OPP	Dielectric Quattro 23mm LNB	20
3614	IDLB-SET01-MULTI-STP	Basic Kit for multiple Single and/or Twin LNBs installation	10
3615	IDLB-SET02-MULTI-QQP	Expansion Kit for multiple Quad/Quattro LNBs installation	20
3616	IDLB-SET03-MULTI-STP	Starter Kit for multiple Single and/or Twin LNBs installation	30

# Mono<sup>™</sup>

Item no.	Model	Description	Qty./Cart.
3501	IDLB-SINM40-MNOO6-8PP	Single Monoblock 40mm LNB, 6° for 80cm dish	30
3522	IDLB-SINM21-MNOO6-8PP	Single Monoblock 23mm LNB ,6° for 80cm dish	30
3524	IDLB-TWNM21-MNOO6-8PP	Twin Monoblock 23mm LNB ,6° for 80cm dish	20
3527	IDLB-QUDM21-MNOO6-8PP	Quad Monoblock 23mm LNB ,6° for 80cm dish	30
3529	IDLB-TWNM22-DUO43-6PP	Twin Monoblock 23mm LNB ,4.3° for 60cm dish	28
3530	IDLB-QUDM22-DUO43-6PP	Quad Monoblock 23mm LNB ,4.3° for 60cm dish	28
3531	IDLB-QUDM21-MNO43-8PP	Quad Monoblock 23mm LNB ,4.3° for 80cm dish	30
3532	IDLB-TWNM22-MNOO3-8PP	Twin Monoblock 23mm LNB ,3° for 80cm dish	30
3533	IDLB-QUDM22-MNOO3-8PP	Quad Monoblock 23mm LNB ,3° for 80cm dish	30
3536	IDLB-TWNM23-MNOO3-8PP	Twin Monoblock 23mm LNB ,3° for 80cm dish (60mm ring)	30
3537	IDLB-QUDM23-MNOO3-8PP	Quad Monoblock 23mm LNB ,3° for 80cm dish (60mm ring)	30
3538	IDLB-SINM62-MNOO3-8PP	Single Monoblock 60mm LNB ,3° for 80cm dish	30
3540	IDLB-TWNM22-MNO43-8PP	Twin Monoblock 23mm LNB ,4.3° for 80cm dish	48
3541	IDLB-SINM25-DOPO4-8PP	Single Monoblock 23mm LNB ,4° for 80cm dish	40
5018	IDLB-SINM22-MNOO6-8PP	Single Monoblock 23mm LNB ,6° for 80cm dish	30
5064	IDLM-QUDM22-TRPOO-6PP	Quad Triplefeed 23mm LNB, 19.2°E+23.5°E+28.2°E for 65cm dish	20
5068	IDLM-SINM20-TRPMN-8PP	Single Triple-feed 23mm LNB 13°E+16°E+19.2°E for 85cm dish	32
3524	IDLB-TWNM21-MNOO6-8PP	Twin Monoblock 23mm LNB ,6° for 80cm dish	20
5094	IDLM-TWNM20-4FDMN-8PP	Twin Quad-feed LNB for 9°E, 13°E, 19.2°E and 23.5°E, for 80cm dish	NA

Ka™			
Item no.	Model	Description	Qty./Cart.
5030	IDLW-SINLRA20-D2045-OPP	Single Ka Circular Dual polarity LNB 23mm 21.4-22.0GHz (LO20.45 GHz)	40
3902	IDLW-TWNLRA20-D212O-OPP	Twin Ka Circular Dual polarity LNB23mm 19.7-20.2GHz (LO21.20 GHz)	40
3903	IDLW-TWHLRA20-D212O-OPP	Twin Ku 10.7-12.75GHz (LO9.75GHz/10.6GHz), Dual Circular Polarity Ka 19.7-20.2GHz (LO 21.20GHz) LNB 23mm	-
5104	IDLK-SINL20-KAKUO-OPP	KaKu Co-locate Linear 23mm LNB with one KaKu switchable output and one Ka output	-
Pro <sup>™</sup>			
Item no.	Model	Description	Qty./Cart.
3130	IDLB-SINR41-H1060-OPP	Single High-Band Circular 40mm LNB (LO10.60 GHz)	80
3134	IDLB-SINL41-H1075-OPP	Single High-Band 40mm LNB (LO10.75 GHz)	80
3124	IDLB-SINSRCOO-OOPRO-OPP	Single C-Band Circular LNB with Scalar ring	18
3125	IDLB-SINSNCOO-OOPRO-OPP	Single C-Band Linear LNB with Scalar ring	18
3126	IDLB-SINFOCOO-OOPRO-OPP	Single C-Band Flange LNB	80
3115	IDLB-SINS40-DISEQ-OPP	Single Straight-feed 40mm LNB with embedded DiSEqC	50
3129	IDLB-SINS41-H1070-OBP	Single Straight-feed 40mm LNB (Australian version, RF bottom)	80
3133	IDLB-SINL41-H1060-OPP	Single High-Band 40mm LNB (LO10.60 GHz)	80
3134	IDLB-SINL41-H1075-OPP	Single High-Band 40mm LNB (LO10.75 GHz)	80
3218	IDLB-TWNR41-H1075-OPP	Twin High-Band Circular 40mm LNB (LO10.75 GHz)	40
3132	IDLB-SINR41-FBAND-OPP	Single Full-Band Circular 40mm LNB	80
3219	IDLB-TWNR41-FBAND-OPP	Twin Full-Band Circular 40mm LNB	30

Item no.	Model	Description	Qty./Cart.
3214	IDLB-TWNFOO-OOPRO-OPP	Twin Flange LNB	120
3215	IDLB-TWNSRCOO-OOPRO-OPP	Twin C-Band Circular LNB with Scalar ring	20
3216	IDLB-TWNSNCOO-OOPRO-OPP	Twin C-Band Linear LNB with Scalar ring	20
3315	IDLB-QUDR41-H1075-OPP	Quad High-Band Circular 40mm LNB (LO10.75 GHz)	40
3309	IDLB-QUDL40-TERRE-OPP	Quad Terrestrial 40mm LNB	60
3409	IDLB-QUTFO1-OOPRO-OPP	Quattro Flange LNB	70
3001	IDLB-OCTL40-OOOOO-OPP	8 Output 40mm LNB	60
3308	IDLB-QUDL20-A2CON-8PP	Quad 23mm ASTRA2Connect LNB with 14GHz filter for 80cm dish	24
3142	IDLB-SINR42-H1075-OPP	Single High-Band Circular 40mm LNB(LO10.75 GHz)	80
3320	IDLB-QUDFO2-OOPRO-OPP	Quad Flange 40mm LNB	70
5046	IDLP-SINF02-OOPRO-OPP	Single Flange LNB	100
3120	IDLB-SINS40-A2WAY-8PP	Single 40mm ASTRA2Connect 2-way LNB	26
3617	IDLB-FKU40-LHORN-OPP	Flange Ku feed horn for prime focus antennas, 40mm neck	120
3618	IDLB-FKU40-BRCKT-OPP	Bracket kit for Flange Ku feed horn	120

# $\mathsf{Unicable}^{^\mathsf{TM}} \, \& \, \, \mathsf{Unicable} \, \, \mathsf{II}^{^\mathsf{TM}}$

Item no.	Model	Description	Qty./Cart.
3013	IDLB-QUDL42-UNI1L-1PP	Unicable Quad 40mm LNB, 1 Legacy (1 splitter)	54
3012	IDLB-QUDL42-UNI1L-OPP	Unicable Quad 40mm LNB, 1 Legacy (No splitter)	54
3014	IDLB-QUDL42-UNI2L-OPP	Unicable Quad 40mm LNB, 2 Legacy (1 splitter)	54
3015	IDLB-QUDL42-UNI2L-1PP	Unicable Quad 40mm LNB, 2 Legacy (1 splitter)	54
3011	IDLB-QUDM20-UNI43-6PP	Unicable Quad Monoblock 23mm LNB ,4.3° for 60cm dish	30
5140	IDLU-PENL42-2UN1L-OPP	Unicable LNB with two identical 5UB outputs and 1 Legacy port	54
5081	IDLB-QUDL43-UNE1L-1PP	Unicable Quad 40mm LNB, 1 Legacy (1 splitter)	54

Item no.	Model	Description	Qty./Cart.
5140	IDLU-PENL42-2UN1L-OPP	Unicable LNB with two identical 5UB outputs and 1 Legacy port	54
5152	IDLU-TRIL40-UNIOO-OPP	Unicable LNB with 3 User bands	50
5153	IDLU-TRIL40-UNI1L-OPP	Unicable LNB with 3 User bands and 1 Legacy port	50
-	Upon Request	Unicable II 40mm LNB with up to 24 User bands over a single Legacy/Unicable output port	50
-	Upon Request	Unicable II 40mm LNB with up to 32 User bands, with a separate Legacy port	50

#### Multiswitch

Unicable<sup>™</sup> & Unicable II<sup>™</sup>

IDLU-USW110-CUO10-24P

Item no.	Model	Description	Qty./Cart.
5050	IDLP-UST112-CUO1O-8PP	Unicable cascadable switch 8 User Bands, Terrestrial input and 1 Legacy port	30
5049	IDLP-UST102-CUO10-4PP	Unicable cascadable switch with 4 User Bands, Terrestrial input and 1 Legacy port	24
5066	IDLU-USW103-CUO1O-4PP	Unicable cascadable switch 4 User Bands	24
3708	IDLP-UST101-CUO10-4PP	Unicable cascadable switch with 4 User Bands, Terrestrial input and 1 Legacy port	24
5100	IDLP-USW104-CUO10-4PP	Unicable cascadable switch 4 User Bands (switch only)	50
5147	IDLU-UST101-CU010-8PP	Dual Satellite cascadable Unicable switch with Terrestrial signal input combined over 8-User Band unicable and 1 legacy ports	25
5151	IDLU-UST110-CUO1O-24P	Unicable II cascadable switch with up to 24 User Bands, with Terrestrial input and	25

Unicable II cascadable switch with up to 24 User Bands with 1 Legacy port

30

1 Legacy output port

5156

## Professional Broadcast Equipment

Item no.	Model	Description	Qty./Cart.
3776	IDLH-1000	Professional Digital Head-End System	1
3799	IDLV-2000AD	Professional DVB TS Divider	1
5092	IDLV-3000AL	Professional Redundancy ASI Switch	1
3769	IDLV-3000P	Professional MPEG-2 DVB Integrated Receiver Decoder	1
3768	IDLV-3000MX	Professional MPEG-2 DVB TS Multiplexer	1
3771	IDLV-3000TP	Professional DVB Scrambler	1
3798	IDLV-3000PE	Professional DVB MPEG-2 Integrated Receiver Decoder and Transcoder	1
3767	IDLV-3000EC	Professional MPEG-2 Encoder	1
3770	IDLV-3000TM	Professional DVB QAM Modulator	1
5055	IDLV-3100PW	Professional HDTV MPEG2/H.264-AVC Integrated Receiver Decoder	1
5105	IDLV-5500P	Professional HDTV IRD and Processor	1
3772	IDLV-4000P	Professional MPEG-2 DVB Integrated Receiver/Decoder with IP interface	1
3791	IDLV-4100PM	Professional DVB Receiver and Trans-modulator	1
3775-20	IDLV-5000PE	Professional DVB HDTV (MPEG4/AVC, H.264)Integrated Receiver Decoder and Transcoder	1
5009	IDLV-5100EC	Professional MPEG-4 Encoder/Transcoder	1
3787	IDLV-5100P	Professional HDTV Integrated Receiver Decoder	1

## Set-Top Box

air LNB	creen		
Item no.	Model	Description	Qty./Cart.
5047	IDLI-8CHE20-OOPOE-OSP	8 channel SAT>IP LNB with PoE Adapter	10
air serve	creen		
4111	IDL 400s	Advanced SAT>IP Multiscreen Server	10
5075	IDL 400c	Advanced Cable>IP Multiscreen Server	10
5150	IDL 400t	Advanced Terrestrial>IP Multiscreen Server	10
airs client	creen		
5041	IDL 420s	Advanced SAT/TERR/CABLE airscreen Client	10
Ζı	B□X <sup>™</sup>		
5051	IDL7750n ZiBox	Advanced HD+ Hybrid Satellite Set-top Box	5
Vc	OLKSB⊡X <sup>™</sup> Web edition <b>•</b>		
4114	IDL 6654n Web Edition+	Advanced HD+ SmartTV Hybrid Satellite Receiver + Embedded Nagravision + Sat>IP	5

## Dish Antenna

Home	e Pro <sup>™</sup>			
Item no.	Model	Description	Color	Qty./Pallet
3800	IDLB-STCF60-KULGO-LPS	60cm steel Ku off-set dish antenna with Easy-fix arm	LG	220
3801	IDLB-STCF80-KULGO-LPS	80cm steel Ku off-set dish antenna with Easy-fix arm	LG	200
3802	IDLB-STCF90-KULGO-LPS	90cm steel Ku off-set dish antenna with Easy-fix arm	LG	150
5103	IDLB-STC120-KUALGO-LPS	120cm steel Ku off-set dish antenna with Easy-fix arm	LG	100
3810	IDLB-STCF60-KUANO-LPS	60cm steel Ku off-set dish antenna with Easy-fix arm	Ant.	220
3811	IDLB-STCF80-KUANO-LPS	80cm steel Ku off-set dish antenna with Easy-fix arm	Ant.	200
3812	IDLB-STCF90-KUANO-LPS	90cm steel Ku off-set dish antenna with Easy-fix arm	Ant.	150
5145	IDLB-STC120-KUANO-LPS	120cm steel Ku off-set dish antenna with Easy-fix arm	Ant.	100
BLAC	K Premium <sup>™</sup>			
Item no.	Model	Description	Color	Qty./Pallet
3816	IDLB-ALCF60-KULGO-LPS	60cm Aluminium Ku off-set dish antenna with Easy-fix arm	LG	150
3817	IDLB-ALCF80-KULGO-LPS	80cm Aluminium Ku off-set dish antenna with Easy-fix arm	LG	150
3818	IDLB-ALCF90-KULGO-LPS	90cm Aluminium Ku off-set dish antenna with Easy-fix arm	LG	100
3819	IDLB-ALCF60-KUANO-LPS	60cm Aluminium Ku off-set dish antenna with Easy-fix arm	Ant.	150
3820	IDLB-ALCF80-KUANO-LPS	80cm Aluminium Ku off-set dish antenna with Easy-fix arm	Ant.	150
3821	IDLB-ALCF90-KUANO-LPS	90cm Aluminium Ku off-set dish antenna with Easy-fix arm	Ant.	100
BLAC	K Ultra <sup>™</sup>			
Item no.	Model	Description	Color	Qty./Pallet
3835	IDLU-ALCF80-KULAO-LPS	80cm Aluminium dish with double-arm (dish plate LG, fixation ANT)	LG/Ant.	225
3836	IDLU-ALCF80-KUALO-LPS	80cm Aluminium dish with double-arm (dish plate ANT, fixation LG)	Ant./LG	225

### Dish Accessories

## L Bracket

Item no.	Model	Description	Qty./Cart.
5106	IDLP-LB25O-ALUOO-OBB	L Bracket 25 Alu.	20
5107	IDLP-LB35O-ALUOO-OBB	L Bracket 35 Alu.	20
5108	IDLP-LB45O-ALUOO-OBB	L Bracket 45 Alu.	20
5112	IDLP-LB25O-STWOO-OBB	L Bracket Welded Steel 25	15
5113	IDLP-LB35O-STWOO-OBB	L Bracket Welded Steel 35	15
5114	IDLP-LB45O-STWOO-OBB	L Bracket Welded Steel 45	12
5115	IDLP-LB55O-STWOO-OBB	L Bracket Welded Steel 55	12
5116	IDLP-LB3OO-STBOO-OBB	L Bracket Bent Steel 30	22
5117	IDLP-LB4OO-STBOO-OBB	L Bracket Bent Steel 40	15
5118	IDLP-LB500-STB00-OBB	L Bracket Bent Steel 50	15
5119	IDLP-LB500-STWOT-OBB	L Bracket T-base Steel 50	200*
5120	IDLP-LB7OO-STWOT-OBB	L Bracket T-base Steel 70	150*

## Balcony Bracket

Item no.	Model	Description	Qty./Cart.
5121	IDLP-BB25O-STL42-OBB	Balcony Bracket Steel 25	15
5122	IDLP-BB35O-STL42-OBB	Balcony Bracket Steel 35	15
5123	IDLP-BB45O-STL42-OBB	Balcony Bracket Steel 45	12
5124	IDLP-BB55O-STL42-OBB	Balcony Bracket Steel 55	12

# Balcory Clip Item no. Model Description Qty/Cart. 5125 IDLP-BB500-STI42-OBB Balcony Clip Steel 50 12 5126 IDLP-BB750-STI42-OBB Balcony Clip Steel 75 12 M Bracket

Item no.	Model	Description	Qty./Cart.
5127	IDLP-MB100-ST000-OBB	M Bracket Steel 10cm	1000*
5128	IDLP-MB18O-STOOO-OBB	M Bracket Steel 18cm	800*
5129	IDLP-MB28O-STOOO-OBB	M Bracket Steel 28cm	600*
5130	IDLP-MB300-ST000-OBB	M Bracket Steel 30cm	500*
5131	IDLP-MB48O-STOOO-OBB	M Bracket Steel 48cm	350*

#### Tri Bracket

Item no.	Model	Description	Qty./Cart.	
5132	IDLP-PB1MO-STO15-OBB	Tri-bracket Steel 100x15cm	**	
Pole Bracket				

# Item no. Model

Item no.	Model	Description	Qty./Cart.
5133	IDLP-PB85O-STO15-OBB	Pole Bracket Steel 85x15cm	**
5134	IDLP-PB85O-STO25-OBB	Pole Bracket Steel 85x20cm	-

<sup>\*</sup>Wooden case \*\*Sold per unit on pallet bases

#### Lambda Bracket

Item no.	Model	Description	Qty./Cart.
5095	IDLP-DB600-ST000-OBB	Lambda Bracket Steel 70	15

#### Patio Mount

Item no.	Model	Description	Qty./Cart.
5136	IDLP-PTKOO-STOOO-OBB	Patio Mount Kit Steel	90
5137	IDLP-PTSOO-STSOO-OBB	Patio Mount Steel Strong	90 est.
5176	IDLP-PTSOO-STOOO-OBB	Patio Mount Steel	90 est.

## H Balcony Clip Steel

Item no.	Model	Description	Qty./Cart.
5139	IDLP-HCOOO-STOOO-OBB	H Balcony Clip Steel	**

## LNB Holders

Item no.	Model	Description	Qty./Cart.
3807	IDLB-HLDR40-OOOO-LBE	Aluminium LNB holder for 40 mm feed	-
3623	IDLB-HLDR40-O3POS-LBE	Multifeed LNB holder 3 sat position for 40 mm feed with dish arm adaptor	-
3624	IDLB-HLDR40-OOOO-LBE	Multifeed LNB holder 3 sat position for 40 mm feed	-
5084	IDLB-HLDR40-O1POS-LBE	LNB holder single position for 40 mm feed	-

For purpose of brevity, some product descriptions in this sheet remain at platform level and may not be referred to as detailed data sheets of the products. Inverto Digital Labs reserves the right to amend, omit or add products, product-lines, and/ or features without prior notice.

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