



Unicable II Programmable/cascadable multiswitch with 32 User Bands, 4 Universal/Wideband Satellite inputs & 1 Terrestrial input

(AC/DC power adapter and power inserter)

Model: IDLU-UWT110-CUO10-32P

Item: 5294



The IDLU-UWT110-CUO10-32P is a small form factor Unicable2 multiswitch enabling installations with up to 32 satellite receivers over a single cable based on digital channel stacking technology. Digital channel stacking technology applies digital signal processing after wideband Analog to Digital converters (full band capture) to select and reorder transponder channels.

The multiswitch supports both Dynamic and Static modes. In Dynamic mode (default), up to 32 EN50607-compatible receivers (or up to 16 EN50494-compatible) connected over the Unicable output ports, can select their desired transponder and receive it over the respective User Band. In Static mode, the multiswitch outputs a fixed transponder-to-IF frequency mapping and can line up to 32 transponders (depending on the bandwidth of the desired transponders) over its Unicable output ports. This allows for an unlimited number of receivers to be connected to the switch making MDU installations substantially cheaper and simpler than ever before.

This multiswitch has 4 satellite inputs that can receive (and cascade) either 4 universal satellite IF bands (LV, LH, HV and HH) from one satellite feed, or 2 wideband satellite IF signals (Horizontal and Vertical) from two satellite feeds. A unique feature of the multiswitch firmware allows to daisy chain two units and combine their outputs with external combiner to support connection of up to 4 wideband satellite IF signals from up to four satellite feeds. It also has a Terrestrial VHF/UHF input. The terrestrial signals are combined over both output ports of the multiswitch. The Terrestrial signal is not amplified.

The multiswitch has two outputs - by default, one of the ports is configured to function as a Unicable port in dynamic mode and the second is configured to function as Universal (Legacy) and switches to Unicable as soon as it receives an EN50494 or EN50607 command.

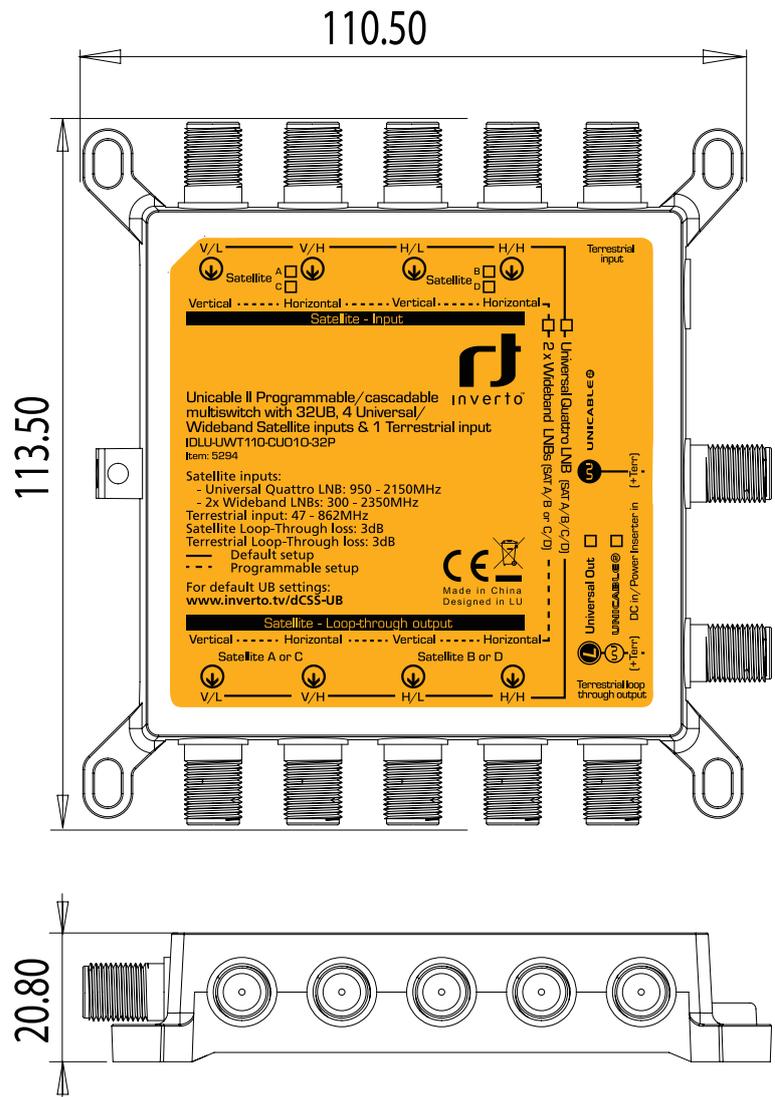
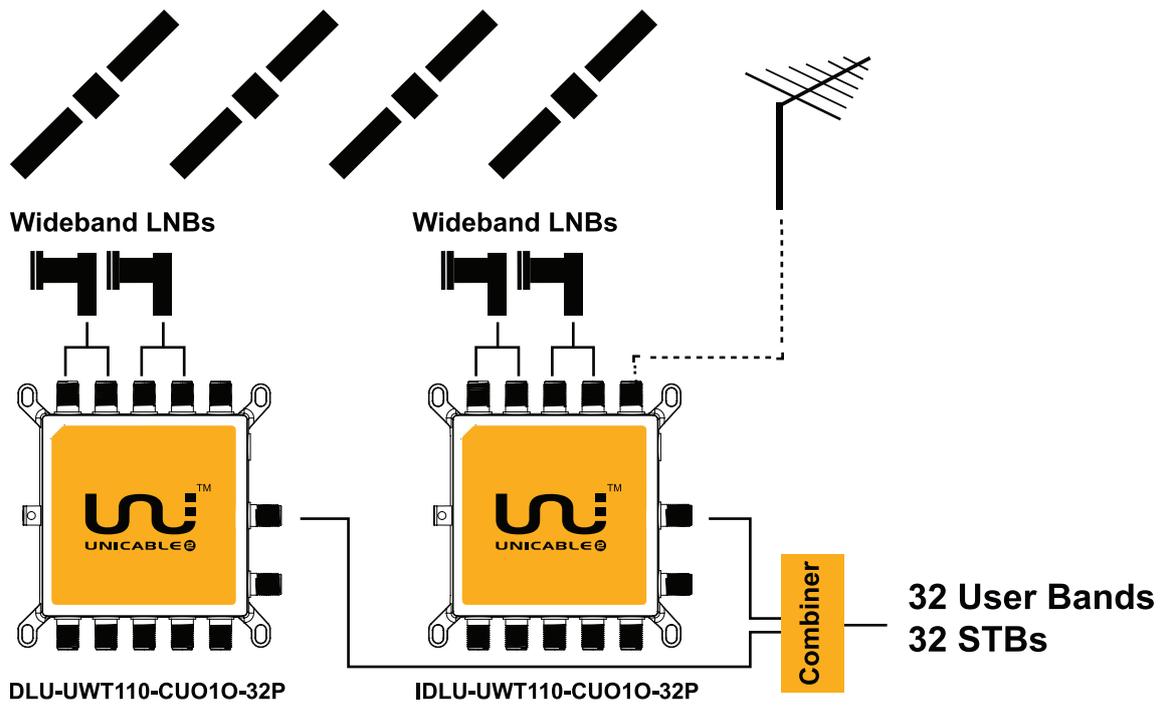
The operating mode and configuration of each output port - unicable/universal, dynamic/static - output power level, channel bandwidth, UB numbers and protocol, center frequencies and the functionality of each of the output ports are fully programmable through Inverto's Unicable II Programmer device and PC software tool.

The multiswitch is powered over the supplied AC/DC adapter and power inserter device allowing greater flexibility in various installation scenarios. The communication protocol between the multiswitch unit and the connected receivers is based on EN50494 and/or EN50607 and can be defined per User Band allowing operators to support installations consisting of both EN50494-only and EN50607-compatible Next Generation PVRs and HGWs.

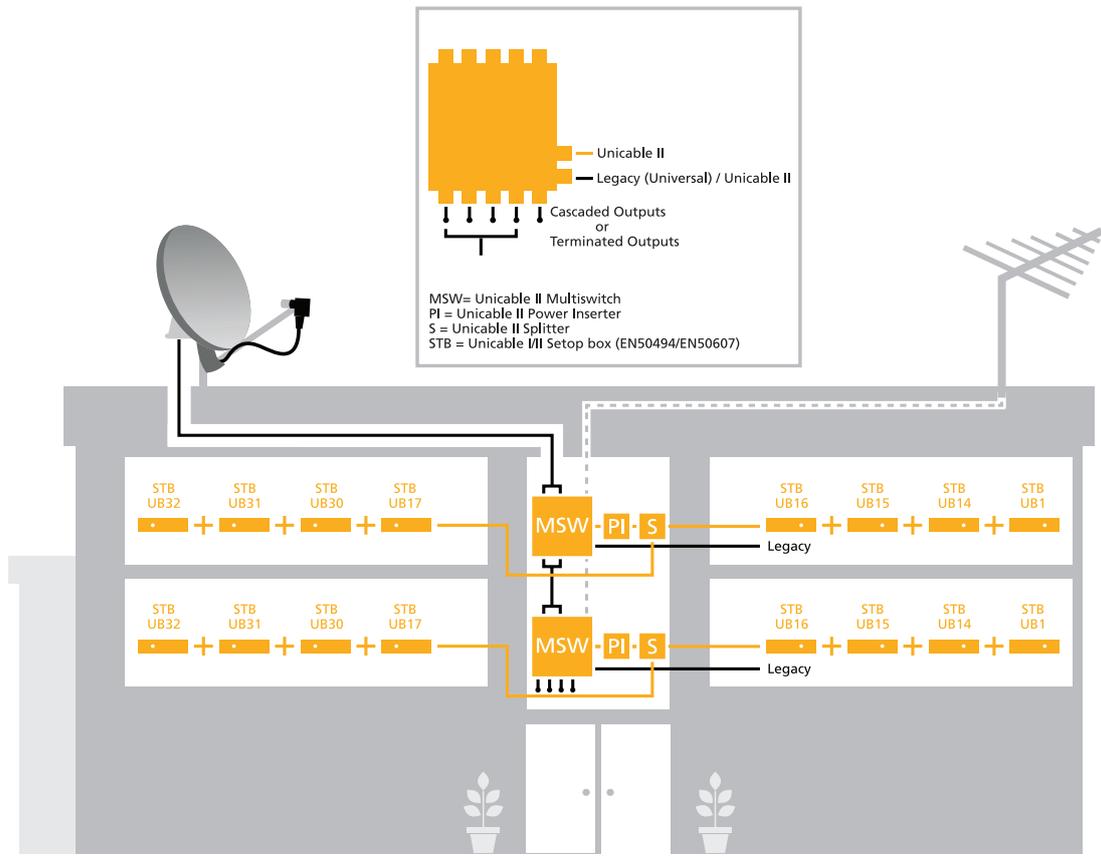
For Indoor and outdoor installations.

* Programmer not included, sold separately as an optional accessory.

** 4 Satellite reception requires additional hardware as illustrated below:

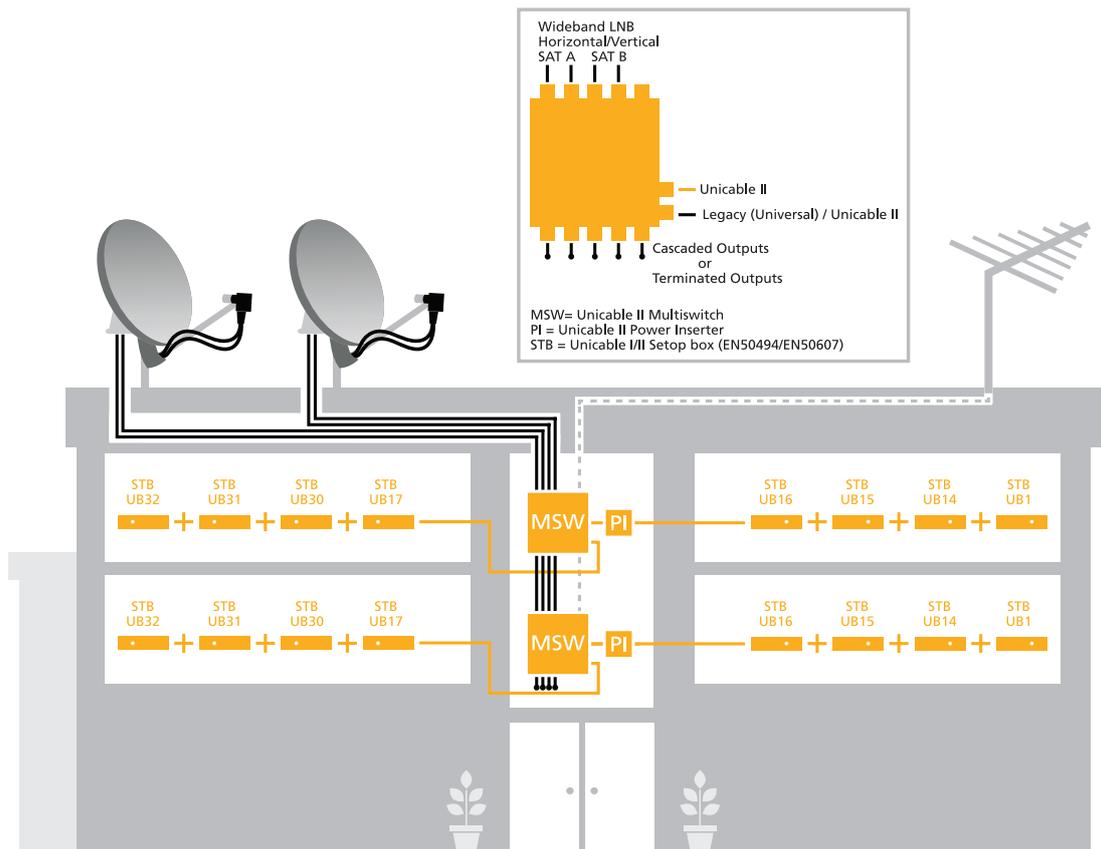


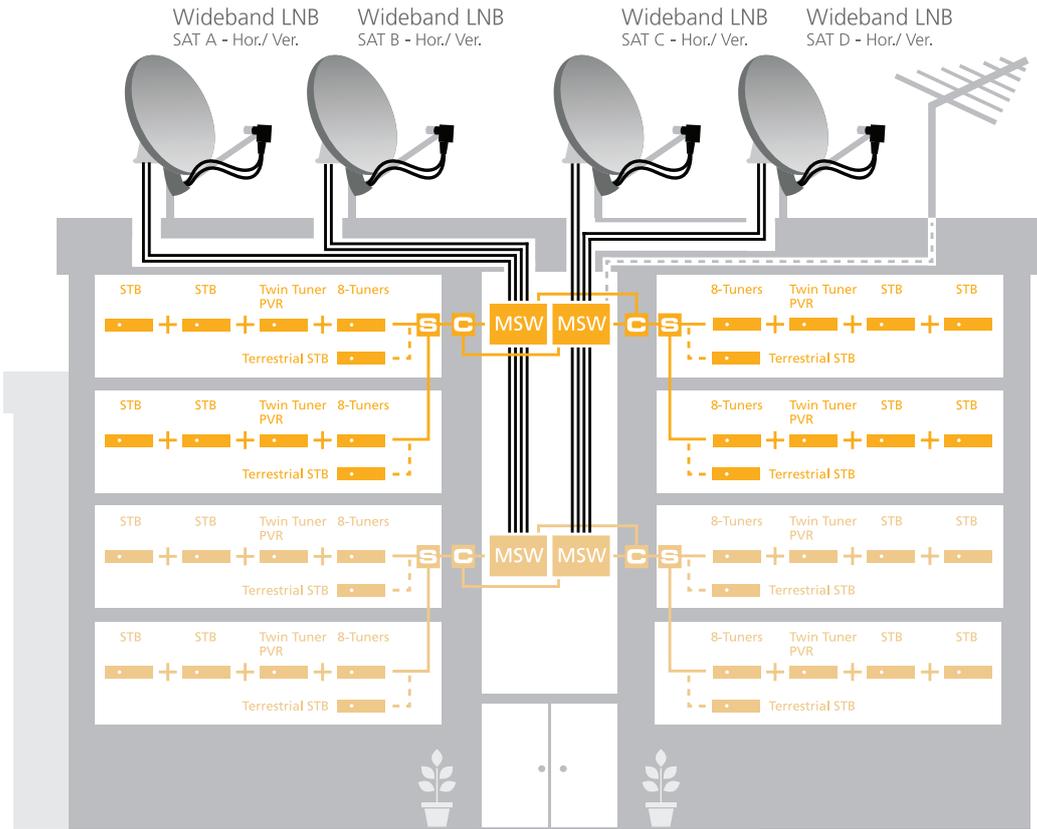
32 User Band Unicable multiswitch with Legacy port Connection Diagram



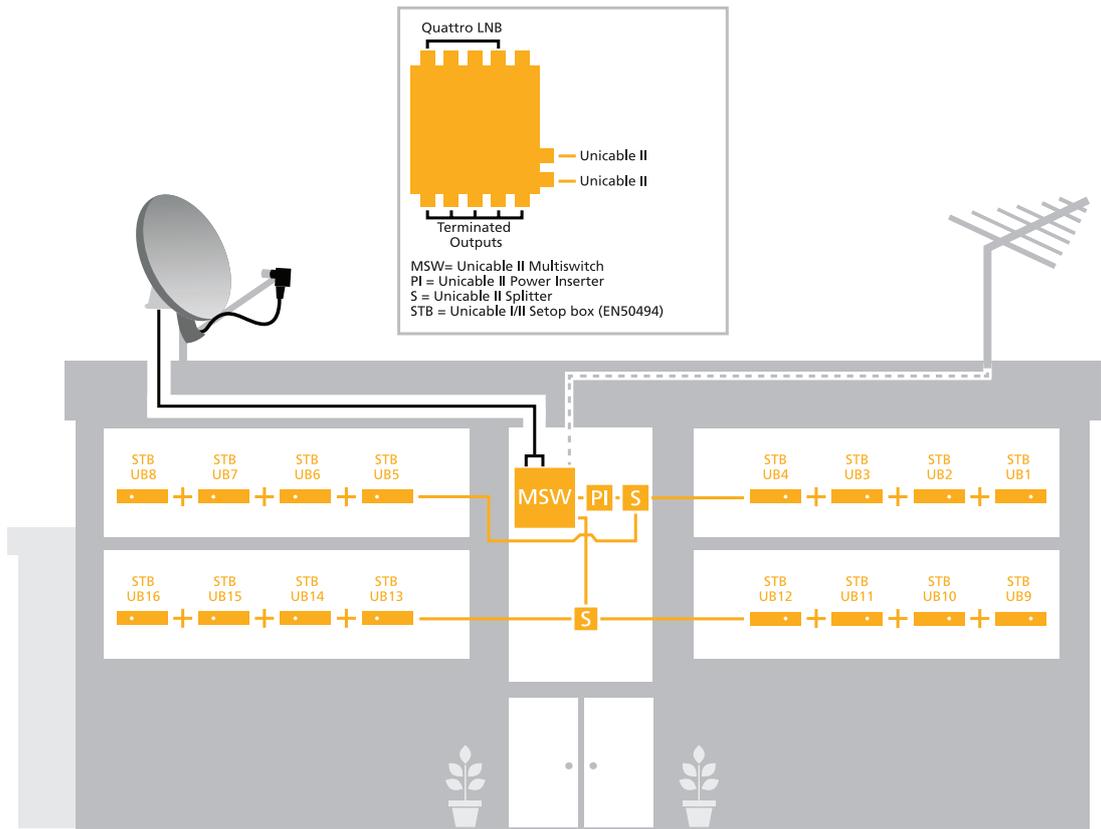
Supplied with AC/DC power adapter and power inserter

Reception of two and four satellites through wideband LNBS





Reception of a single satellite feed by up to 16 Unicable (EN50494) receivers



Technical Specifications

Inputs	4 x IF inputs: - From 1x Quattro LNB (default) - From 2x Wideband LNBs 1 x UHF/VHF input from Terrestrial antenna
Outputs	4 x Loophthrough satellite IF outputs 1 x Loophthrough terrestrial output 1 x Unicable II (dCSS/EN50607) output, dynamic mode by default, supporting up to 32 UBs. With combined terrestrial signal. 1 x Universal (Legacy) by default upon power up, auto switch to Unicable II upon receiving EN50494/EN50607 command. With combined terrestrial signal
Control Protocol	DiSEqC1.x/DiSEqC2.0, EN50494/EN50607
Inputs frequency range: Satellite	Satellite: - Quattro LNB: 950-2150MHz (default) - Wideband LNB: 300-2350MHz
Terrestrial	47 ~ 862 MHz
Loop-through loss: Satellite	3 dB max.
Terrestrial	3 dB max.
Conversion gain: Unicable output	25dB min
Legacy universal output	10dB min
Output signal level (AGC controlled)	Configurable (default -25dBm)
Input power range	-50 to -15 dBm
User band (Channel) bandwidth	Configurable, 10~80MHz (default 30MHz)
User band (Channel) gain ripple	3 dB max.
User band frequencies (Channels)	Configurable; Default 32 User bands: CH1: 1210MHz (EN50494+EN50607) CH17: 1530MHz (EN50607) CH2: 1420MHz (EN50494+EN50607) CH18: 1566MHz (EN50607) CH3: 1680MHz (EN50494+EN50607) CH19: 1602MHz (EN50607) CH4: 2040MHz (EN50494+EN50607) CH20: 1638MHz (EN50607) CH5: 984MHz (EN50494+EN50607) CH21: 1716MHz (EN50607) CH6: 1020MHz (EN50494+EN50607) CH22: 1752MHz (EN50607) CH7: 1056MHz (EN50494+EN50607) CH23: 1788MHz (EN50607) CH8: 1092MHz (EN50494+EN50607) CH24: 1824MHz (EN50607) CH9: 1128MHz (EN50607) CH25: 1860MHz (EN50607) CH10: 1164MHz (EN50607) CH26: 1896MHz (EN50607) CH11: 1256MHz (EN50607) CH27: 1932MHz (EN50607) CH12: 1292MHz (EN50607) CH28: 1968MHz (EN50607) CH13: 1328MHz (EN50607) CH29: 2004MHz (EN50607) CH14: 1364MHz (EN50607) CH30: 2076MHz (EN50607) CH15: 1458MHz (EN50607) CH31: 2112MHz (EN50607) CH16: 1494MHz (EN50607) CH32: 2148MHz (EN50607)
RF Isolation:	
Satellite/Satellite IF	25 dB min.
Satellite/Terrestrial	25 dB min.
Satellite Channel/Channel (UBs)	28 dB min.
LO phase noise	@1 KHz: -80 max dBc/Hz @10 KHz: -92 max dBc/Hz @100 KHz: -96 max dBc/Hz @1 MHz: -104 max dBc/Hz
Integrated phase noise	1.5 degrees max.
Input / Output VSWR	2.5 : 1
Input / Output Impedance	75 Ω (F-Type)
Legacy port switching	V/L=>13V/0kHz , V/H=>13V/22kHz H/L=>18V/0kHz , H/H>18V/22kHz
LNB power supply	13/18V, max 300mA
DC Power consumption	500mA @13Vdc [max.]
Working Temperature	- 20 ~ + 60 °C
Dimensions	113.50 x 110.50 x 20.80(H x W x D) mm

For purpose of brevity, some product descriptions in this sheet remain at platform level and may not be referred to as detailed datasheets of the products. Inverto Digital Labs reserves the right to amend, omit or add products, product-lines, and / or features without notice. As product specifications may change without notice, always contact Inverto to obtain the latest product specification sheets.

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