

Unicable II®

Cascadable Multiswitch with Terr input & 12 Unicable II/
Legacy + equalized Terrestrial outputs
IDLU-UST112-CU012-32S
Item: 6597



This Multiswitch unit connects to a Quattro or Wideband LNBs and offers a terrestrial input port to connect a terrestrial antenna and enable the distribution of satellite TV as well as DTT/DAB broadcasts at MDU/IRS installations. A manual switch selects whether the satellite inputs connect to a Quattro LNB or up to two Wideband LNBs for receiving up to two full satellite broadcasts. The loop-through trunk ports can be connected to cascade additional Multiswitch units.

The DC-input port of the Multiswitch unit powers the trunk lines which power the connected LNB and the built-in Terrestrial amplifier of the unit and of any other cascaded units. The Trunk power LED will turn green when the Trunk lines are powered.

The output ports are powered by the connected STBs enabling super low power consumption from the trunk lines and powering as many cascaded switches as possible using a single power supply unit. If a connected STB is not able to power its respective port, a power inserter can be utilized. The Multiswitch features a manual switch allowing to power the trunk lines from the STB ports. If the connected STBs are not able to provide sufficient power, a power inserter can be utilized. This is useful in installations having no power supply available next to the Multiswitch unit in order to power its trunk lines and the connected LNB via the DC-in port.

Each of the twelve STB output ports supports either Legacy or Unicable mode (auto-detect). The Unicable mode is compatible with either SatCR (Unicable, EN50494) or dCSS (Unicable II, EN50607) STB models and delivers 16 User Bands. The ports feature a status LED indicating their operational mode:

- Solid green = Legacy mode
- Blinking green = dCSS or SatCR mode
- Off = no voltage detected on the port (only terrestrial signal available on the port when the unit is powered)

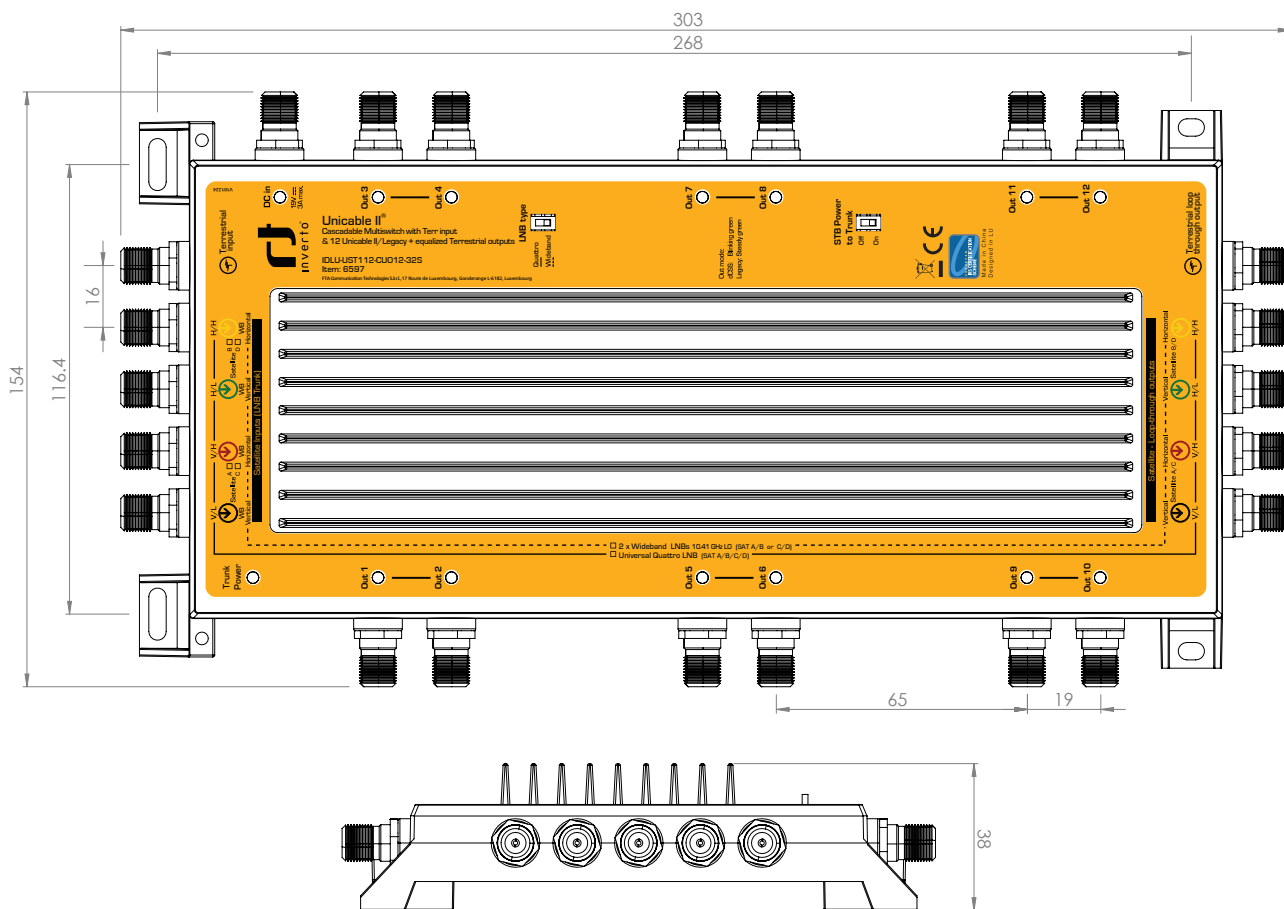
All the twelve STB output ports combine the Terrestrial input with unity gain.

For Indoor and outdoor (IP54) installations.

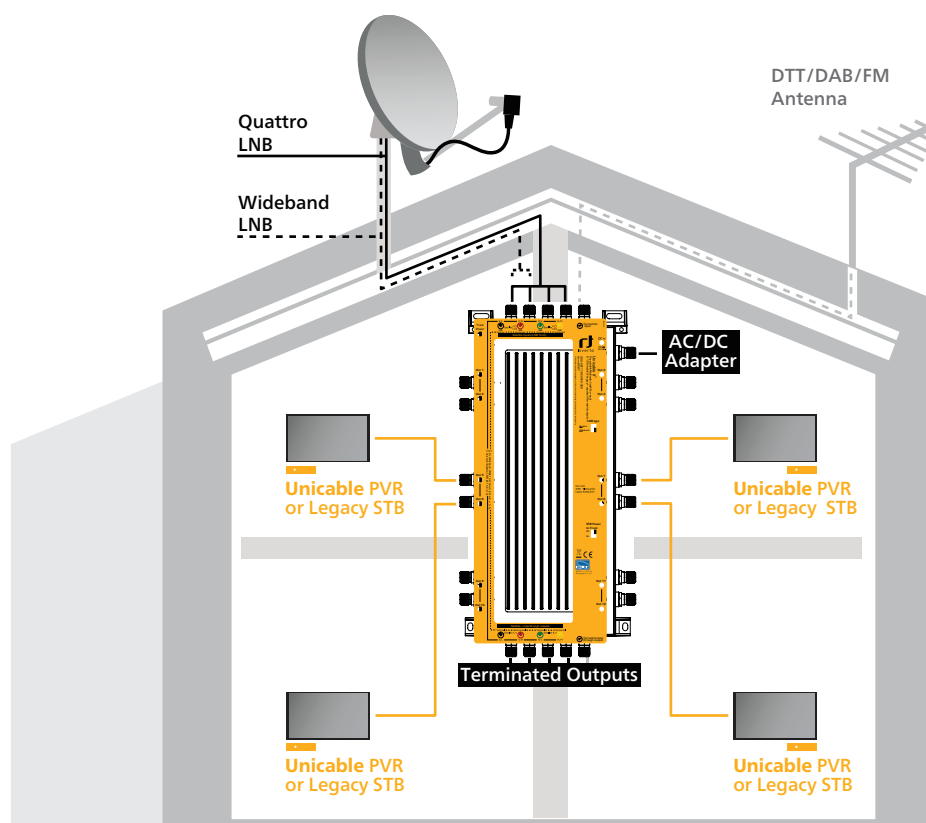


- 2 SAT
- 32 User Bands
- Terrestrial
- STB Powered Trunk
- 12x Unicable/Legacy

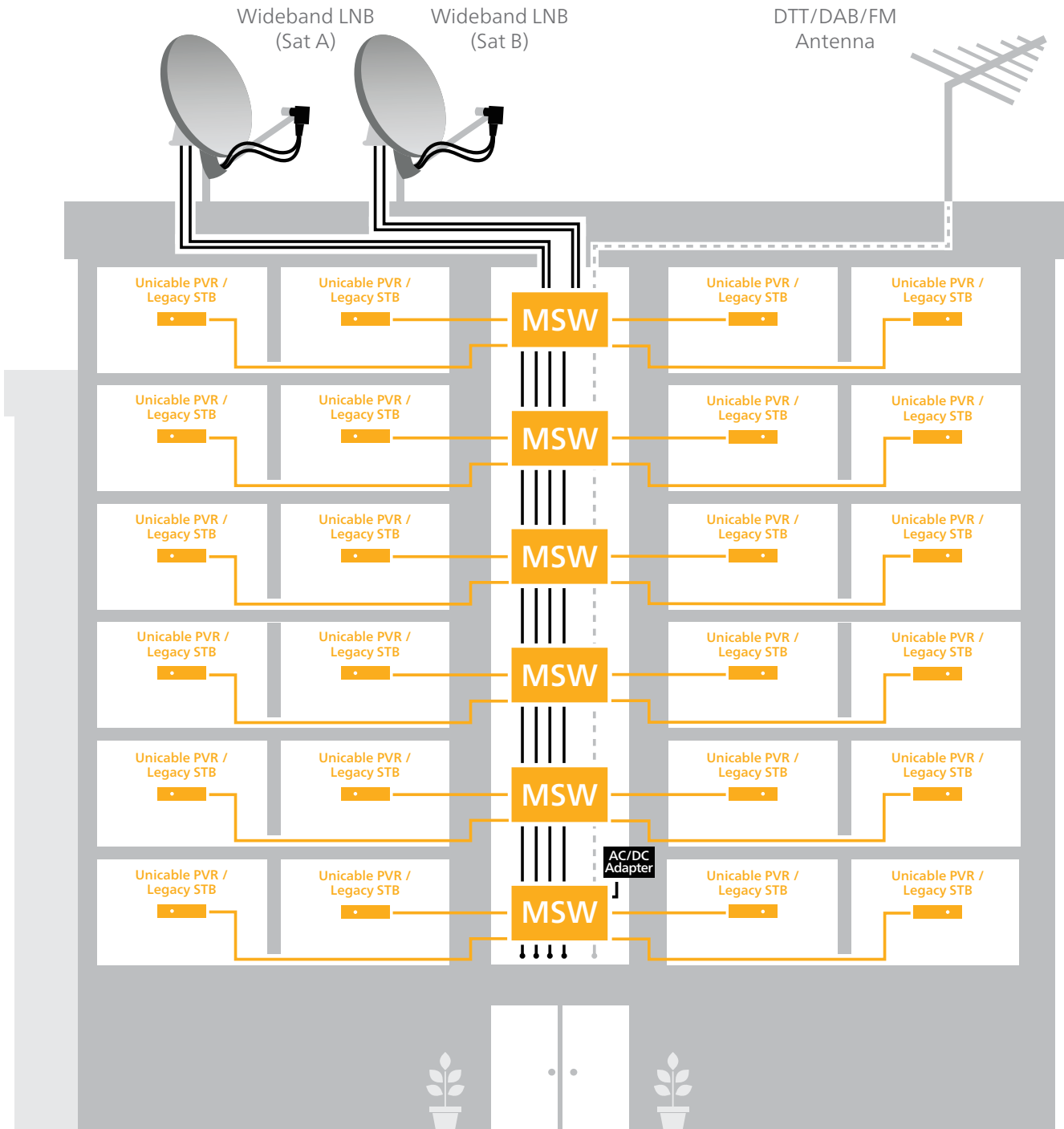




Typical single household installation



Typical MDU/IRS building installation with two Wideband LNBS receiving two satellites



Technical data

Frequency range	Satellite		Quattro LNB: 950 MHz ~ 2150MHz Wideband LNB: 300 MHz ~ 2350 MHz (LO=10.40 GHz)
	Terrestrial	VHF UHF	174-230 MHz 470-790 MHz
Inputs (F-type connectors)			4x Satellite IF inputs: From 1x Quattro LNB or from up to 2x Wideband LNBs 1 x DTT/DAB input from Terrestrial antenna
Trunk outputs (F-type connectors) Tap output ports (F-type connectors)			4 Satellite IF + 1 TERR 12 x dCSS (16 UBs) / SatCR / Legacy auto-detect ports with combined Terrestrial signal ports with combined Terrestrial signal
Trunk DC pass	Satellite		Yes
	Terrestrial		No
Trunk max through-loss	Satellite		6 dB max.
	Terrestrial		0 ±1 dB gain
Gain (Tap)	Satellite	Out of AGC	>25 dB
	Terrestrial	AGC	-25 dB to +27 dB -2 ~ +3 dB
TERR IIP3			10dBm min.
Max Input signal level (aggregated)	Satellite		0dBm (108dBuV)
	Terrestrial		-20dBm (88dBuV)
Output power level (AGC)	Satellite	dCSS/Unicable - UB power	-25 dBm (83 dBuV) ±2 dB
		Legacy - average TP power	-25 dBm (83 dBuV) ±4 dB
Output level variation (input signal: single carrier at start/mid/ end band freq @ -20dBm)	Satellite	dCSS/Unicable	<2 dB
	Terrestrial	Legacy Trunk	<10 dB 4 dB max. <4 dB
Input power dynamic range (aggregated)	Satellite		-32 dBm to -4 dBm (76 dBuV to 104 dBuV)
Return loss	Satellite Trunk ports		>10 dB
	Terrestrial Trunk ports		>8 dB
	Tap output ports	Satellite	>8 dB
		Terrestrial	>8 dB
Isolation	Trunk port to port		>30 dB
	Trunk port to Tap port		>26 dB
Integrated phase noise			1.5 degrees max.
Control and protocols			Unicable I® (SatCR) /Unicable II® (dCSS) DiSEqC 1.x/2.0 EN50949/EN50607 13/18VDC + 0/22kHz Legacy/dCSS auto switching
User bands per port			32
dCSS/SatCR/Legacy mode indication			LED
Input/Output impedance			75 ohm
Power supply	via DC in / SAT Trunk		19 VDC
	via Tap ports		13/18 VDC
Power from DC-in to Trunk			Yes
Power from STB ports to Trunk			On/Off switch
LNB power supply			500mA max @ 18VDC
Power consumption			Output port: 300mA (12 UBs) / 365mA (32UBs) max. @ 11-20V DC, (supplied by the connected STB) DC in / Trunk port: 100mA max. @ 18V DC (no LNB load)
Power indication			DC-in / Trunk / STB LEDs: >11.5V Green <11.5V Red
Earth terminals			Yes
Operating temperature			-20°C to +50°C
IP			IP54
Product dimensions (H x W x D)			30.3 x 15.4 x 3.8 mm
Weight			896 g

Unicable II™ (dCSS) port specifications

User band (channel) frequencies

Default Unicable II™ dynamic user bands per output port:

CH1: 1210 MHz EN50607 + EN50494 (dCSS + SatCR)
 CH2: 1420 MHz EN50607 + EN50494 (dCSS + SatCR)
 CH3: 1680 MHz EN50607 + EN50494 (dCSS + SatCR)
 CH4: 2040 MHz EN50607 + EN50494 (dCSS + SatCR)
 CH5: 985 MHz EN50607 + EN50494 (dCSS + SatCR)
 CH6: 1050 MHz EN50607 + EN50494 (dCSS + SatCR)
 CH7: 1115 MHz EN50607 + EN50494 (dCSS + SatCR)
 CH8: 1275 MHz EN50607 + EN50494 (dCSS + SatCR)
 CH9: 1340 MHz EN50607 (dCSS)
 CH10: 1485 MHz EN50607 (dCSS)
 CH11: 1550 MHz EN50607 (dCSS)
 CH12: 1615 MHz EN50607 (dCSS)
 CH13: 1745 MHz EN50607 (dCSS)
 CH14: 1810 MHz EN50607 (dCSS)
 CH15: 1875 MHz EN50607 (dCSS)
 CH16: 1940 MHz EN50607 (dCSS)

User band (channel) bandwidth

46 MHz

User band (channel) gain ripple

3 dB max.

Logistical info

Packaging dimensions (h x w x d)

31.5 cm x 15.7 cm x 4.2cm

Packaging weight

0.93Kg

Quantity per carton

15

Carton dimensions (h x w x d)

49 x 33 x 23.8 cm

Carton weight

14.88kg

Quantity per pallet

240pcs

Optional accessories (sold separately):

- 5958 Unicable II® Power Inserter, 5-2400MHz IDLU-PINS03-OOOOO-OBT
- 5639 19W Power Supply adapter for Unicable II® / Unifiber™ (EU plug) IDLU-ADPT01-19WOO-EPM
- 5582 65W Power Supply adapter for Unicable II® multiswitches (EU plug) IDLU-ADPT04-19342-EPM
- 6700 65W Power Supply adapter for Unicable II® multiswitches (EU plug) IDLU-ADPT05-19342-EPM