



Unicable II®

Cascadable switch with Terrestrial input and 4x Unicable II®/Legacy + equalized Terrestrial outputs IDLU-UST111-CU040-32P

Item: 6098

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.

Each of the four 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 four STB output ports combine the Terrestrial input with unity gain.

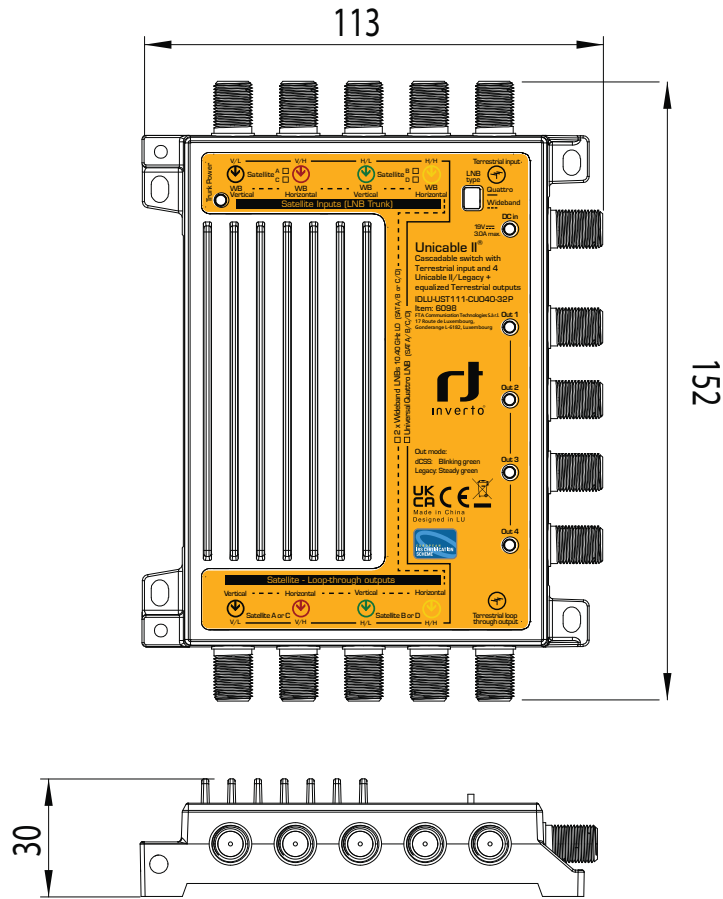
The unit configuration and RF parameters can be programmed with Inverto's SatPal Controller device*

For Indoor and outdoor (IP54) installations.

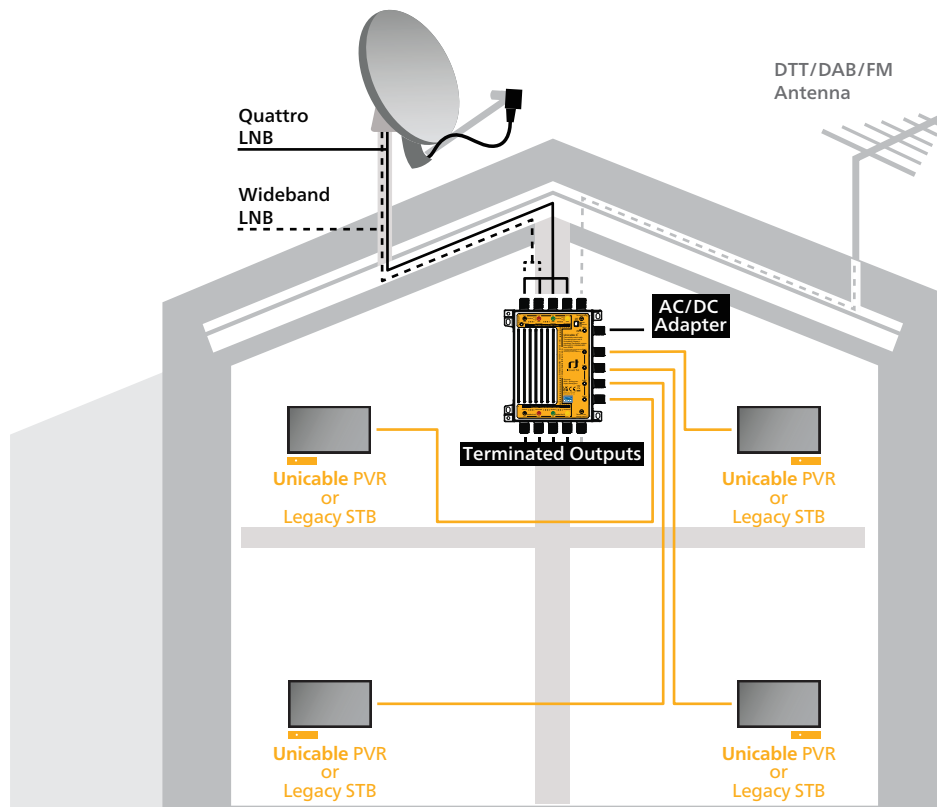
* The SatPal Controller device is not included and is sold separately.



- 2 SAT
- 16 User Bands
- Programmable*
- Terrestrial
- 4x UNICABLE II OR Legacy



Typical single household installation



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



Optional accessories (sold separately):

- | | |
|--|-----------------------|
| ■ 5958 Unicable II® Power Inserter, 5-2400MHz | IDLU-PINS03-00000-OBT |
| ■ 5639 19W Power Supply adapter for Unicable II® / Unifiber™ (EU plug) | IDLU-ADPT01-19W00-EPM |
| ■ 5582 65W Power Supply adapter for Unicable II® multiswitches (EU plug) | IDLU-ADPT04-19342-EPM |
| ■ 5415 SatPal™ Controller | IDLU-SPAL03-000BT-OPP |

Technical data

Frequency range: satellite	Quattro LNB: 950 MHz ~ 2150MHz Wideband LNB: 290 MHz ~ 2350MHz (LO=10.40 GHz)
Frequency range: terrestrial	VHF 174-230 MHz UHF 470-790 MHz
Inputs	4x Satellite IF inputs: From 1x Quattro LNB or From up to 2x Wideband LNBs 1 x DTT/DAB input from Terrestrial antenna
Outputs	4 Satellite IF + 1 TERR 4 x dCSS (16 UBs) / SatCR / Legacy auto-detect ports with combined Terrestrial signal
Input power range	-36 dBm to -4 dBm (72 dBuV to 104 dBuV) - Aggregated
Output signal level (AGC)	dCSS/Unicable - UB power: -25 dBm (83 dBuV) ±2 dB Legacy - average TP power: -25 dBm (83 dBuV) ±4 dB
RF isolation: satellite/satellite (input)	30 dB min.
RF isolation: satellite/terrestrial (input)	30 dB min.
RF isolation: satellite ch/ch (UBs, output)	30 dB min.
Loop-through loss: satellite	3.5 dB max.
Loop-through loss: terrestrial	0 ±1 dB gain
Gain: Unicable II™ (dCSS) output (out of AGC)	>25 dB
Gain: terrestrial signal	0 ~ 5 dB
Integrated phase noise	1.5 degrees max.
Control protocols	EN50494 (Unicable, SatCR), EN50607 (Unicable II, dCSS), DiSEqC1.0/2.0, 13 V/18 V + 0 kHz/22 kHz
Legacy port switching	V/L => 13 V/0 kHz, V/H => 13 V/22 kHz H/L => 18 V/0 kHz, H/H => 18 V/22 kHz
Input/Output impedance	75 Ω (F-type)
Input/Output VSWR	2.5 : 1
LNB power supply	500 mA max. @ 18 VDC
Power consumption	Output ports (16 active UBs, supplied by the connected STB): 365mA max. @11-20V DC DC in / trunk port: 100mA max. @18V DC (no LNB load)
Working temperature	-20 °C ~ +50 °C
IP protection	IP54
Product dimensions (H x W x D)	15.2 x 11.3 x 2.9 cm
Weight	280 g

Unicable II™ (dCSS) port specifications

User band (channel) bandwidth	46 MHz, programmable 10 MHz ~ 80 MHz
User band (channel) gain ripple	3 dB max.
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)

Logistical info

Packaging dimensions (h x w x d)	15.5 cm x 11.8 cm x 3.5 cm
Packaging weight	0.357 Kg
Quantity per carton	30
Carton dimensions (h x w x d)	48.2 cm x 24.9 cm x 19.5 cm
Carton weight	10.7 Kg
Quantity per pallet	840



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.

For further details contact: sales@inverto.tv
FTA Communication Technologies S.à r.l - Tel. +352 264 367 1 Fax. +352 264 313 68
17 Route de Luxembourg, Gonderange, L-6182, Luxembourg