Unicable II®

Cascadable Multiswitch with Terr input & 12 Sky dSCR/ SatCR/ Legacy + equalized Terrestrial outputs
ISKY-UST112-CUO12-16S
Item: 6563

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.
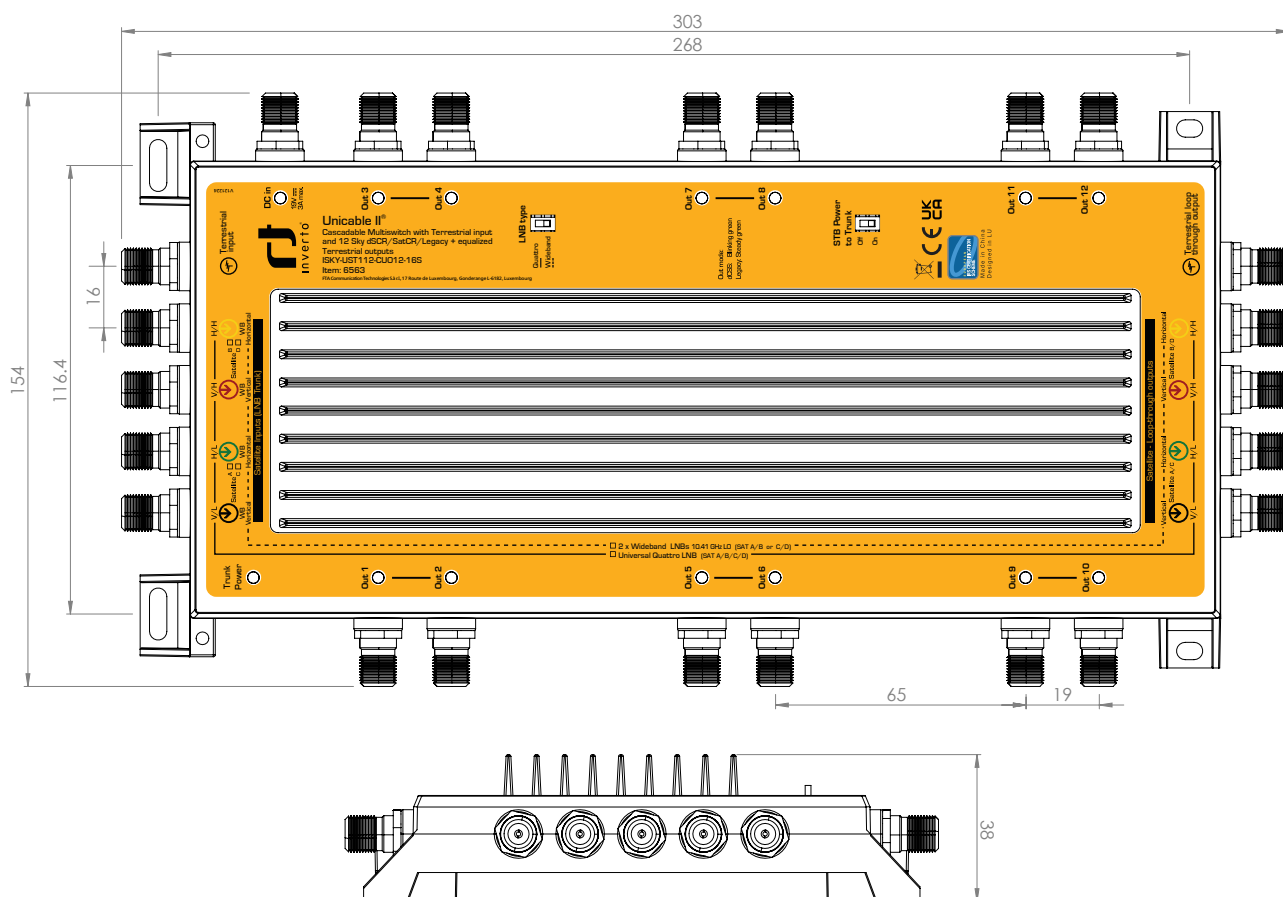
Each of the twelve STB output ports is compatible with either Sky Q, Sky+ HD or Sky+ STB models, delivers 16 User Bands and features a Port status LED indicating its operational mode:

- Solid green = Legacy mode (e.g. Sky+ STB).
- Blinking green = dSCR or SatCR mode (e.g. Sky Q or Sky+ HD STBs).
- Off = no voltage detected on the port (only terrestrial signal available on the port)
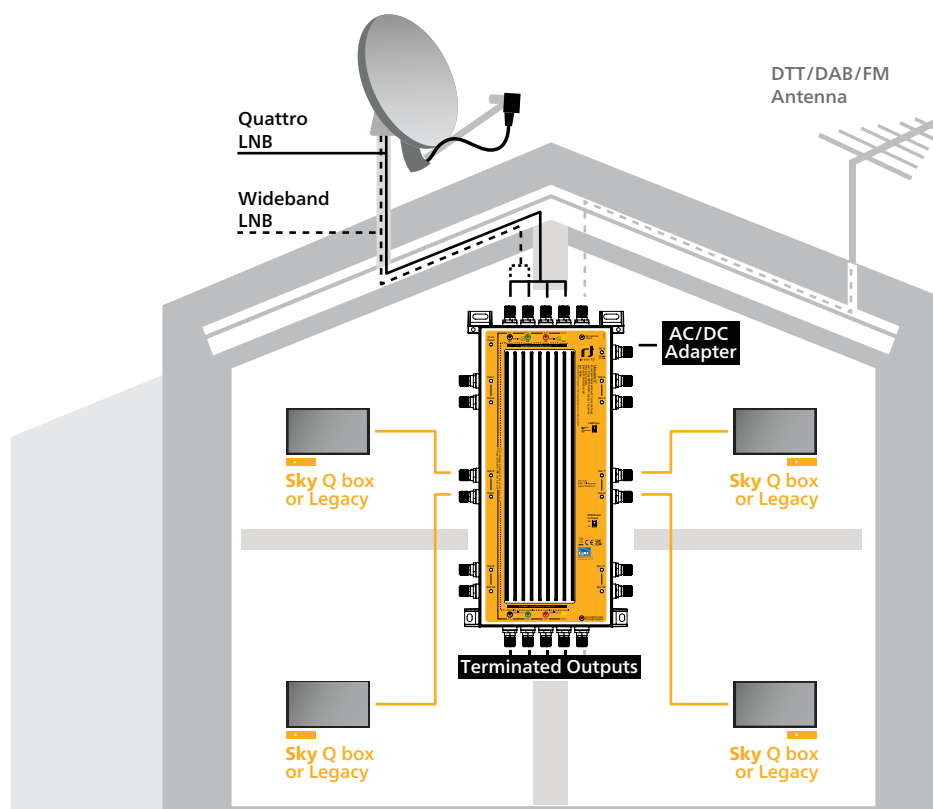
All the twelve STB output ports combine a unity-gain equalized Terrestrial input signal.

For Indoor and outdoor (IP54) installations

2 SAT

16 User Bands

sky dSCR

Terrestrial

STB Powered Trunk

12x Sky Q/Legacy

303
268

154
116.4
16

RDSD2A

Unicable II®
Cascadable Multiswitch with Terrestrial input
and 12 Sky dSCR/SatCR/Legacy + equalized
Terrestrial outputs
ISKY-UST112-CU012-16S
Item: 6563
FTA Communication Technologies S.à r.l, 17 Route de Luxembourg, Gonderange L-6183, Luxembourg

DC in
18V rms
3A max.
Out 3
Out 4
LNB type
Out 7
Out 8
STB Power
to Trunk
Out 11
Out 12
Terrestrial
input
Terrestrial loop
through output

Quattro
Wideband

Out mode
dSCR Blinking green
Legacy Steady green

Off   On

Trunk
Power
Out 1
Out 2
Out 5
Out 6
Out 9
Out 10

☐ 2 x Wideband LNBs 10.41 GHz LO (SAT A/B or C/D)
☐ Universal Quattro LNB (SAT A/B/C/D)

65   **19**

38

Typical single household installation

Quattro
LNB

Wideband
LNB

DTT/DAB/FM
Antenna

AC/DC
Adapter

Sky **Q** box
or Legacy

Sky **Q** box
or Legacy

Terminated Outputs

Sky **Q** box
or Legacy

Sky **Q** box
or Legacy

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

Wideband LNB (Sat A)*

Wideband LNB (Sat B)

DTT/DAB/FM Antenna

Sky Q Box / Legacy

Sky Q Box / Legacy

MSW

Sky Q Box / Legacy

Sky Q Box / Legacy

Sky Q Box / Legacy

Sky Q Box / Legacy

MSW

Sky Q Box / Legacy

Sky Q Box / Legacy

Sky Q Box / Legacy

Sky Q Box / Legacy

MSW

Sky Q Box / Legacy

Sky Q Box / Legacy

Sky Q Box / Legacy

Sky Q Box / Legacy

MSW

Sky Q Box / Legacy

Sky Q Box / Legacy

Sky Q Box / Legacy

Sky Q Box / Legacy

MSW

Sky Q Box / Legacy

Sky Q Box / Legacy

AC/DC Adapter

Sky Q Box / Legacy

Sky Q Box / Legacy

MSW

Sky Q Box / Legacy

Sky Q Box / Legacy

* If Sky service is required to be distributed, it should be connected over the SAT A position

inverto®

Technical data

Frequency range	Satellite		Quattro LNB: 950 MHz ~ 2150MHz Wideband LNB: 290 MHz ~ 2350 MHz (LO=10.41 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 Sky dSCR (16 UBs) / SatCR / Legacy auto-detect ports with combined Terrestrial signal
Trunk DC pass	Satellite Terrestrial		Yes No
Trunk max through-loss	Satellite Terrestrial		6 dB max. 0 ±1 dB gain
Gain (Tap)	Satellite Terrestrial	Out of AGC AGC	>25 dB -25 dB to +27 dB -2 ~ +3 dB
TERR IIP3			10dBm min.
Max Input signal level (aggregated)	Satellite Terrestrial		0dBm (108dBuV) -20dBm (88dBuV)
Output power level (AGC)	Satellite	dCSS/Unicable - UB power Legacy - average TP power	-25 dBm (83 dBuV) ±2 dB -25 dBm (83 dBuV) ±4 dB
Output level variation (input signal: single carrier at start/mid/ end band freq @-20dBm)	Satellite Terrestrial	dSCR/Unicable Legacy Trunk	<2 dB <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 Terrestrial Trunk ports Tap output ports	 Satellite Terrestrial	>10 dB >8 dB >8 dB >8 dB
Isolation	Trunk port to port Trunk port to Tap port		>30 dB >26 dB
Integrated phase noise			1.5 degrees max.
Control and protocols			Sky dSCR, SatCR, DiSEqC 1.x/2.0 EN50949/EN50607 13/18VDC + 0/22kHz Legacy/dSCR auto switching
User bands per port dSCR/SatCR/Legacy mode indication Input/Output impedance			16 LED 75 ohm
Power supply	via DC in / SAT Trunk via Tap ports		19 VDC 13/18 VDC
Power from DC-in to Trunk Power from STB ports to Trunk LNB power supply			Yes On/Off switch 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

User band (channel) frequencies:

Sky UK (dSCR) User Band		EN50494/EN50607 User Bands		
3 : 1680MHz	19 : 1530MHz	1 : 1210MHz		9 : 1340MHz
9 : 1280MHz	20 : 1580MHz	2 : 1420MHz	EN50494	10 : 1485MHz
11 : 1380MHz	21 : 1630MHz	3 : 1680MHz		11 : 1550MHz
14 : 1480MHz	22 : 1730MHz	4 : 2040MHz		12 : 1615MHz
15 : 980MHz	23 : 1780MHz	5 : 985MHz	EN50607	13 : 1745MHz
16 : 1030MHz	24 : 1830MHz	6 : 1050MHz		14 : 1810MHz
17 : 1080MHz	25 : 1880MHz	7 : 1115MHz		15 : 1875MHz
18 : 1130MHz	26 : 1930MHz	8 : 1275MHz		16 : 1940MHz

(EN50607 brackets columns 9–16)

User band (channel) bandwidth	46 MHz
User band (channel) gain ripple	3 dB max.

Logistical info

Packaging dimensions (h x w x d)	318 x 158 x 42 mm
Packaging weight	1.01 Kg
Quantity per carton	15
Carton dimensions (h x w x d)	490 x 330 x 238 mm
Carton weight	15.86 Kg
Quantity per pallet	720

Optional accessories (sold separately):

■ Power Inserter
5958   Unicable II® Power Inserter, 5-2400MHz   IDLU-PINS03-OOOOO-OBT

■ 19W Power supply unit
5638   19W Power Supply adapter for Unicable II®/ Unifiber™ (UK plug)   IDLU-ADPT01-19WOO-UPM

■ 65 W power supply unit
5581   65W Power Supply adapter for Unicable II® multiswitches (UK plug)   IDLU-ADPT04-19342-UPM

■ 65 W power supply unit
6699   65W Power Supply adapter for Unicable II® multiswitches (UK plug)   IDLU-ADPT05-19342-UPM