Unicable II®

Cascadable Multiswitch with Terr input & 8 Sky dSCR /SatCR/ Legacy + equalized Terrestrial outputs

ISKY-UST112-CU008-16S

Item: 6595

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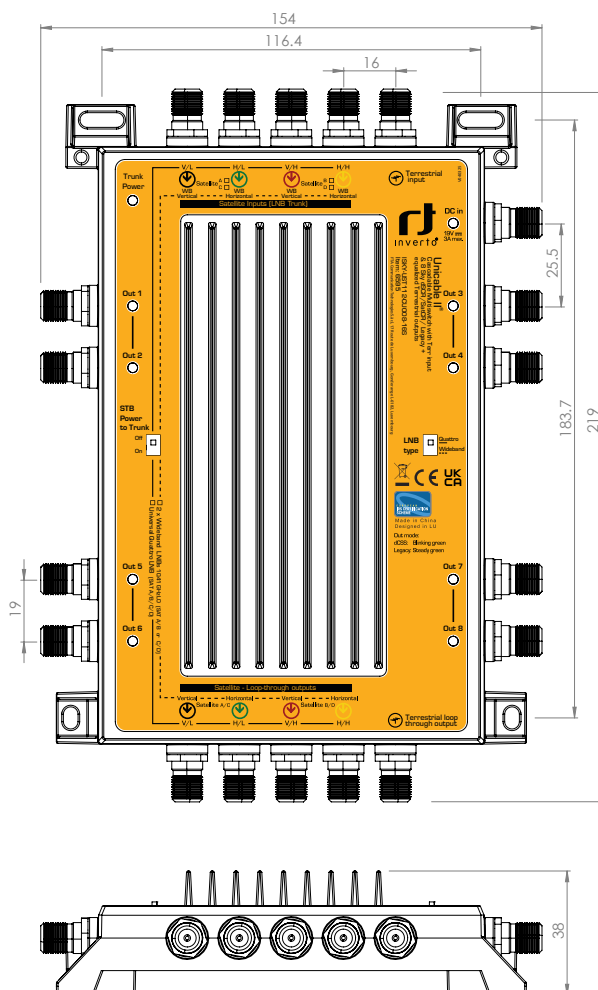
Each of the eight STB output ports is compatible with either Sky Q, Sky+ HD or Sky+ STB models, delivers 16 User Bands and features a Port status LED indicating its operational mode:

- 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)
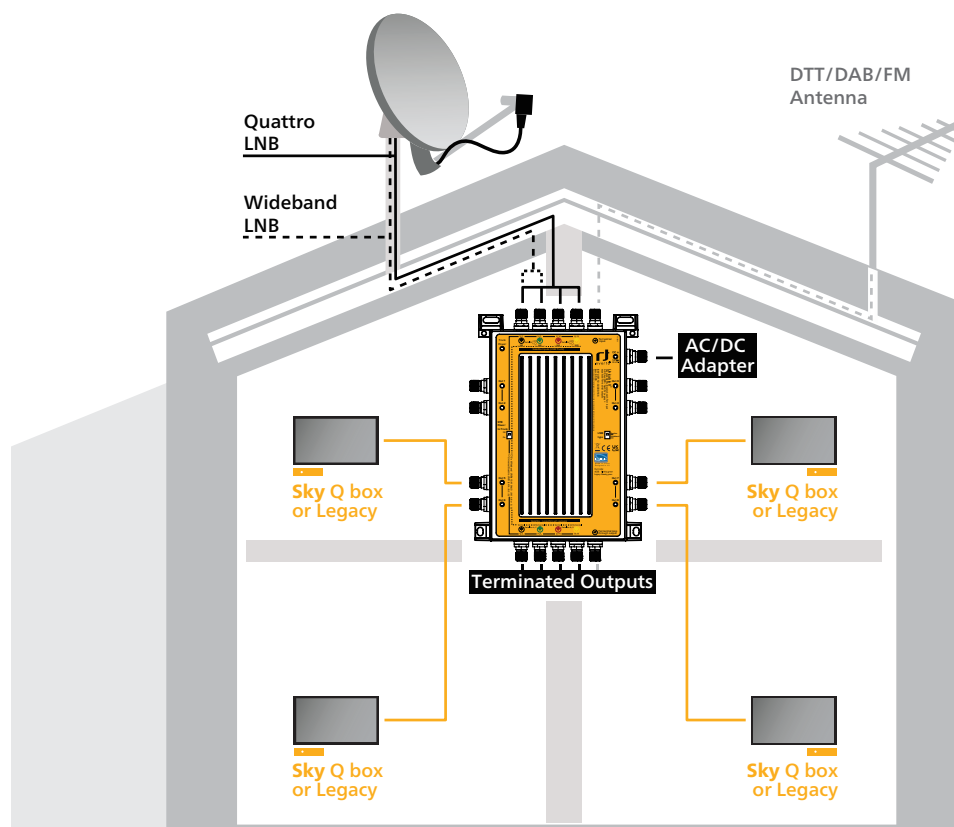
All the eight STB output ports combine a unity-gain equalized Terrestrial input signal.

For Indoor and outdoor (IP54) installations

2 SAT

16 User Bands

sky dSCR

Terrestrial

STB Powered Trunk

8 x Sky Q/Legacy

154
116.4
16
25.5
183.7
219
19
38

Trunk Power
Satellite Inputs [LNB Trunk]
V/L H/L V/H H/H
WB WB WB WB
Horizontal Horizontal
Satellite A Satellite B
Terrestrial input
DC in
19V min
3A max.

Out 1
Out 2
STB Power to Trunk
Off
On

Out 3
Out 4

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Unicable II

LNB type
Quattro
Wideband

CE UK CA

Made in China
Designed in EU

Out mode
dCSS Blinking green
Legacy Steady green

Out 5
Out 6

Out 7
Out 8

Satellite - Loop-through outputs
Vertical Horizontal Vertical Horizontal
Satellite A/C Satellite B/D
V/L H/L V/H H/H
Terrestrial loop through output

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

inverto®

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

Wideband LNB (Sat A)* Wideband LNB (Sat B) DTT/DAB/FM Antenna

Q Box / Legacy Q Box / Legacy Q Box / Legacy Q Box / Legacy

MSW

Q Box / Legacy Q Box / Legacy Q Box / Legacy Q Box / Legacy

MSW

Q Box / Legacy Q Box / Legacy Q Box / Legacy Q Box / Legacy

MSW

Q Box / Legacy Q Box / Legacy Q Box / Legacy Q Box / Legacy

MSW

Q Box / Legacy Q Box / Legacy Q Box / Legacy Q Box / Legacy

MSW

AC/DC Adapter

Q Box / Legacy Q Box / Legacy Q Box / Legacy Q Box / Legacy

MSW

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

Technical data

Frequency range	Satellite		Quattro LNB: 950 MHz ~ 2150MHz Wideband LNB: 290 MHz ~ 2350MHz (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 8 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	Out of AGC AGC	>25 dB -25 dB to +27 dB
	Terrestrial		-2 ~ +3
TERR IIP3			10 dBm 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	dSCR/Unicable Legacy Trunk	5 dB max. 10 dB max. 4 dB max.
	Terrestrial		4 dB max.
Input power dynamic range (aggregated)	Satellite		-34 dBm to -4 dBm (74 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)			21.9 x 15.4 x 3.8cm
Weight			628 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	10 : 1485MHz
11 : 1380MHz	21 : 1630MHz	3 : 1680MHz	11 : 1550MHz
14 : 1480MHz	22 : 1730MHz	4 : 2040MHz	12 : 1615MHz
15 : 980MHz	23 : 1780MHz	5 : 985MHz	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

(EN50494: bands 1–4; EN50607: bands 5–8; EN50607: bands 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)	234 x 158 x 42 mm
Packaging weight	0.717 Kg
Quantity per carton	10
Carton dimensions (h x w x d)	335 x 250 x 238 mm
Carton weight	7.6 Kg
Quantity per pallet	960

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