

Johansson

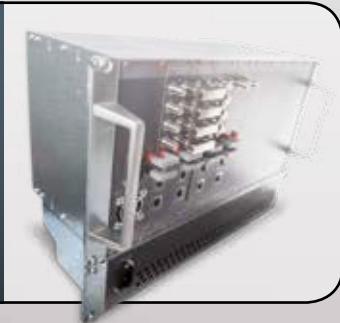
CATALOGUE

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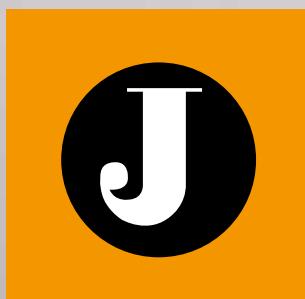


**HOSPITALITY &
RESIDENTIAL
MDU
SOLUTIONS**

**WIRELESS
SATELLITE
DISTRIBUTION
SOLUTIONS**



**SATELLITE
SINGLE CABLE
SOLUTIONS**



**REMOTE
MANAGEMENT
SOLUTIONS**



For every **evolution** a **custom made solution**

Our flexible team offers you for every **evolution** a **custom made** **solution**

"UnitronGroup is an international group of companies, offering state-of-the-art headend Digital Signal Processing technologies and digital TV accessories. These technologies and products are ideal for TV distribution to multi-dwelling and residential buildings.

End users have access to the 'Johansson' branded products via a worldwide network of distributors and integrators.

In this fast moving market, innovation and flexibility are the main keywords. Therefore, UnitronGroup runs multiple factories and R&D centers in Belgium and the Czech Republic. Buying a Johansson product is buying a cutting-edge piece of electronics that will last for years!"

Willy Lamaire
CEO UnitronGroup



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Digital Modular Headends

- ▶ Johansson has developed a complete range of Digital Modular Headends (DMH), which are the ideal TV distribution system for middle-sized and large buildings (MDU). We offer a complete product range, consisting of COFDM (DVB-T) and QAM (DVB-C) modulators and IPTV streamers. All of these products are available with satellite, terrestrial or A/V inputs. Thanks to the modular design, the system is scalable to suit your specific needs. We also present our system configurator (page 20).



INDEX | DMH

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Digital Modular Headends

ProQuad | DVB-S(2) → DVB-T

The **DVB-S(2)** to **DVB-T** modules each have 4 inputs allowing the reception of 4 different satellite bands per module. Because all modules have 4 satellite tuners and a built-in multiswitch, reception of 4 different transponders coming from one of the 4 input satellite bands is possible.

Depending on the type of module, up to 4 DVB-T multiplexes can be distributed per module, offering you one of the most flexible and cost-efficient solutions available on the market!

5302S | T | Q

- ▶ 4 satellite tuners (reception of 4 transponders per module)
- ▶ 4 satellite inputs (4 satellite bands per module)
- ▶ integrated multiswitch allows flexible routing of satellite programs to DVB-T multiplexes
- ▶ distribute up to 32 programs per module
- ▶ ref. 5303S/T/Q: decode up to 16 programs per module with multi-service CAM (encoded programs from all 4 tuners can be routed through 1 CAM)
- ▶ easy configuration with built-in webserver
- ▶ remote access possibility via RMU ref. 5950



5302S | 5303S | 5302T | 5303T | 5302Q | 5303Q

Input: DVB-S(2)

Number of inputs	-	4 with 4 active loop-through outputs (0 dB loss)
Tuner	-	4 tuners (4 transponders)
Frequency range	MHz	950-2150
Level	dBm	-55 to -25
Bandwidth	MHz	36
Modulation	-	DVB-S(2): QPSK, 8-PSK DVB-S: QPSK
LNB power (DC+tone)	V	0/13/18 + 22kHz DiSEqC®
LNB current per input	mA	max. 250

Output: DVB-T

Number of outputs	-	1 with 1 loop through (max 1,5 dB loss)
Frequency range	MHz	47-862 (VHF-UHF)
Multiplexes	-	1 2 adjacent 4 adjacent
Channel bandwidth	MHz	6/7/8
Modulation	-	QPSK, 16-QAM, 64-QAM
OFDM mode	-	2K
Forward Error Correction (FEC)	-	1/2, 2/3, 3/4, 5/6, 7/8
Guard interval	-	1/4, 1/8, 1/16, 1/32
Output bitrate/mux	Mbps	up to 31,7
Modulation Error Rate (MER)	dB	40
Spectral inversion	-	yes
Output level	dBpV	68 to 83 (adjustable)
Cl-slot	-	no yes no yes no yes
Capacity	-	up to 8 programs up to 16 programs up to 32 programs

General

Connectors	-	RF: 10 x "F" connector female Management: RJ-45 (Ethernet) DC: banana sockets
Power supply	VDC	15
Consumption	A	1,5
Operating temperature	°C	0 to +40
Dimensions	-	5 RU x 8 TE x 195 mm

Digital Modular Headends

ProQuad | DVB-T → DVB-T

J johansson

The **DVB-T to DVB-T** modules are the ideal solution to regenerate a poor quality DVB-T signal. But the 5310Q and 5311Q are much more powerful than a normal DVB-T regenerator! Each module has 4 DVB-T tuners, and 4 DVB-T modulators. Thanks to a built-in multiswitch, remapping of the programs between the input and the output is possible. This makes it possible to rearrange the multiplexes, delete some programs, change the DVB-T parameters,...



5310Q | 5311Q

- ▶ 4 tuners allow reception of 4 multiplexes per module
- ▶ 4 output DVB-T multiplexes per module
- ▶ distribute up to 32 programs per module
- ▶ decode up to 16 programs per module with multi-service CAM (5311Q)
- ▶ easy configuration with built-in webserver
- ▶ remote access possibility via RMU ref. 5950

5310Q | 5311Q

Input: DVB-T		
Number of inputs	-	1 with 1 active loop-through output (± 1 dB)
Tuner	-	4 tuners (4 multiplexes)
Frequency range	MHz	VHF: 174-230 UHF: 470-862
Level	dBm	-55 to -20
Bandwidth	MHz	6/7/8
Modulation	-	QPSK: 1/2, 2/3, 3/4, 5/6, 7/8 16-QAM: 1/2, 2/3, 3/4, 5/6, 7/8 64-QAM: 1/2, 2/3, 3/4, 5/6, 7/8
LNA power	V	0/5/12/24 (max. 100 mA)
Output: DVB-T		
Number of outputs	-	1 with 1 loop through (max 1,5 dB loss)
Frequency range	MHz	47-862 (VHF-UHF)
Multiplexes	-	4 adjacent
Channel bandwidth	MHz	6/7/8
Modulation	-	QPSK, 16-QAM, 64-QAM
OFDM mode	-	2K
Forward Error Correction (FEC)	-	1/2, 2/3, 3/4, 5/6, 7/8
Guard interval	-	1/4, 1/8, 1/16, 1/32
Output bitrate/mux	Mbps	up to 31,7
Modulation Error Rate (MER)	dB	40
Spectral inversion	-	yes
Output level	dBµV	68 to 83 (adjustable)
CI-slot	-	no yes
Capacity	-	up to 32 programs
General		
Connectors	-	RF: 4 x "F" connector female Management: RJ-45 (Ethernet) DC: banana sockets
Power supply	VDC	15
Consumption	A	1,5
Operating temperature	°C	0 to +40
Dimensions	-	5 RU x 8 TE x 195 mm

Digital Modular Headends

ProQuad | AV → DVB-T

The quad **AV** to **DVB-T** module has 4 inputs,
to distribute up to 4 analog video sources over the coaxial network.



- ▶ 4 AV stereo inputs per module
- ▶ easy configuration with built-in webserver
- ▶ change important parameters: LCN, resolution, brightness, contrast, hue, saturation,...
- ▶ ideal solution for CCTV or near-VOD!
- ▶ remote access possibility via RMU ref. 5950

Input: CVBS (A/V)		
Number of inputs	-	4 x AV (CVBS)
Video processing	-	Conformance with IEC 13818-2 (MPEG2 video) and ISO/IEC 11172-3 (MPEG1 audio) standards
Video resolution	-	SIF: 352 x 288 SVCD: 480 x 576 HALF D1: 352 x 576 D1: 720 x 576 544: 544 x 576
Video bitrate	kbps	1500 to 7000 (Typ. 6000)
Audio volume	dB	-6 to +6 (Typ. 0)
Output: DVB-T		
Number of outputs	-	1 with 1 loop through (max 1,5 dB loss)
Frequency range	MHz	47-862 (VHF-UHF)
Multiplexes	-	2 adjacent
Channel bandwidth	MHz	6/7/8
Modulation	-	QPSK, 16-QAM, 64-QAM
OFDM mode	-	2K
Forward Error Correction (FEC)	-	1/2, 2/3, 3/4, 5/6, 7/8
Guard interval	-	1/4, 1/8, 1/16, 1/32
Output bitrate/mux	Mbps	up to 31,7
Modulation Error Rate (MER)	dB	40
Spectral inversion	-	yes
Output level	dBµV	68 to 83 (adjustable)
Capacity	-	4 programs
General		
Connectors	-	Video input: 4 x CINCH Audio input: 4 x 3,5 mm jack RF: 2 x "F" connector female Management: RJ-45 (Ethernet) DC: banana sockets
Power supply	VDC	15
Consumption	A	0,8
Operating temperature	°C	0 to +40
Dimensions	-	5 RU x 8 TE x 195 mm

Digital Modular Headends

ProQuad | DVB-S(2) → DVB-C

J johansson

The **DVB-S(2)** to **DVB-C** modules each have 4 inputs allowing the reception of 4 different satellite bands per module. Because all modules have 4 satellite tuners and a built-in multiswitch, reception of 4 different transponders coming from one of the 4 input satellite bands is possible. Depending on the type of module, up to 4 DVB-C multiplexes can be distributed per module, offering you one of the most flexible and cost-efficient solutions available on the market!

5352S|T|Q

- ▶ 4 satellite tuners (reception of 4 transponders per module)
- ▶ 4 satellite inputs (4 satellite bands per module)
- ▶ integrated multiswitch allows flexible routing of satellite programs to DVB-C multiplexes
- ▶ distribute up to 32 programs per module
- ▶ ref. 5353S/T/Q: decode up to 16 programs per module with multi-service CAM
(encoded programs from all 4 tuners can be routed through 1 CAM)
- ▶ easy configuration with built-in webserver
- ▶ remote access possibility via RMU ref. 5950



5353S|T|Q

5352S | 5353S | 5352T | 5353T | 5352Q | 5353Q

Input: DVB-S(2)

Number of inputs	-	4 with 4 active loop-through outputs (0 dB loss)
Tuner	-	4 tuners (4 transponders)
Frequency range	MHz	950-2150
Level	dBm	-55 to -25
Bandwidth	MHz	36
Modulation	-	DVB-S(2): QPSK, 8-PSK DVB-S: QPSK
LNB power (DC+tone)	V	0/13/18 + 22kHz DiSEqC®
LNB current per input	mA	max. 250

Output: DVB-C

Number of outputs	-	1 with 1 loop through (max 1,5 dB loss)
Frequency range	MHz	47-862 (VHF-UHF)
Multiplexes	-	1 2 adjacent 4 adjacent
Channel bandwidth	MHz	6/8
Modulation	-	6 MHz: 64-QAM 8 MHz: 64-QAM/256-QAM
Output bitrate/mux	Mbps	up to 51,3
Modulation Error Rate (MER)	dB	40
Spectral inversion	-	yes
Output level	dBpV	68 to 83 (adjustable)
Cl-slot	-	no yes no yes no yes
Capacity	-	up to 8 programs up to 16 programs up to 32 programs

General

Connectors	-	RF: 10 x "F" connector female Management: RJ-45 (Ethernet) DC: banana sockets
Power supply	VDC	15
Consumption	A	1,5
Operating temperature	°C	0 to +40
Dimensions	-	5 RU x 8 TE x 195 mm

Digital Modular Headends

ProQuad | DVB-T → DVB-C

The **DVB-T** to **DVB-C** modules allow the reception of 4 DVB-T multiplexes, which can be remapped and transmodulated to 4 DVB-C multiplexes.



- ▶ 4 tuners (reception of 4 multiplexes per module)
- ▶ 4 DVB-C output multiplexes per module
- ▶ integrated multiswitch allows flexible routing of terrestrial programs to DVB-C multiplexes
- ▶ distribute up to 32 programs per module
- ▶ ref. 5361Q: decode up to 16 programs per module with multi-service CAM
(encoded programs from all 4 tuners can be routed through 1 CAM)
- ▶ easy configuration with built-in webserver
- ▶ remote access possibility via RMU ref. 5950

		5360Q		5361Q
Input: DVB-T				
Number of inputs	-	1 with 1 active loop-through output (± 1 dB)		
Tuner	-	4 tuners (4 multiplexes)		
Frequency range	MHz	VHF: 174-230 UHF: 470-862		
Level	dBm	-55 to -20		
Bandwidth	MHz	6/7/8		
Modulation	-	QPSK: 1/2, 2/3, 3/4, 5/6, 7/8 16-QAM: 1/2, 2/3, 3/4, 5/6, 7/8 64-QAM: 1/2, 2/3, 3/4, 5/6, 7/8		
LNA power	V	0/5/12/24 (max 100 mA)		
Output: DVB-C				
Number of outputs	-	1 with 1 loop through (max 1,5 dB loss)		
Frequency range	MHz	47-862 (VHF-UHF)		
Multiplexes	-	4 adjacent		
Channel bandwidth	MHz	6/8		
Modulation	-	6 MHz: 64-QAM 8 MHz: 64-QAM/256-QAM		
Output bitrate/mux	Mbps	up to 51,3		
Modulation Error Rate (MER)	dB	40		
Spectral inversion	-	yes		
Output level	dB _p V	68 to 83 (adjustable)		
CI-slot	-	no	yes	
Capacity	-	up to 32 programs		
General				
Connectors	-	RF: 4 x "F" connector female Management: RJ-45 (Ethernet) DC: banana sockets		
Power supply	VDC	15		
Consumption	A	1,5		
Operating temperature	°C	0 to +40		
Dimensions	-	5 RU x 8 TE x 195 mm		

Digital Modular Headends

ProQuad | AV → DVB-C

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The quad **AV** to **DVB-C** module has 4 inputs, to distribute up to 4 analog video sources over the DVB-C network.



5380

- ▶ 4 AV stereo inputs per module
- ▶ easy configuration with built-in webserver
- ▶ change important parameters: LCN, resolution, brightness, contrast, hue, saturation,...
- ▶ ideal solution for CCTV or near-VOD!
- ▶ remote access possibility via RMU ref. 5950

5380

Input: CVBS(A/V)

Number of inputs	-	4 x AV (CVBS)
Video processing	-	Conformance with IEC 13818-2 (MPEG2 video) and ISO/IEC 11172-3 (MPEG1 audio) standards
Video resolution	-	SIF: 352 x 288 SVCD: 480 x 576 HALF D1: 352 x 576 D1: 720 x 576 544: 544 x 576
Video bitrate	kbps	1500 to 7000 (Typ. 6000)
Audio volume	dB	-6 to +6 (Typ. 0)

Output: DVB-C

Number of outputs	-	1 with 1 loop through (max 1,5 dB loss)
Frequency range	MHz	47-862 (VHF-UHF)
Multiplexes	-	2 adjacent
Channel bandwidth	MHz	6/8
Modulation	-	6 MHz: 64-QAM 8 MHz: 64-QAM/256-QAM
Output bitrate/mux	Mbps	up to 51,3
Modulation Error Rate (MER)	dB	40
Spectral inversion	-	yes
Output level	dBµV	68 to 83 (adjustable)
Capacity	-	4 programs

General

Connectors	-	Video input: 4 x CINCH Audio input: 4 x 3,5 mm jack RF: 2 x "F" connector female Management: RJ-45 (Ethernet) DC: banana sockets
Power supply	VDC	15
Consumption	A	0,8
Operating temperature	°C	0 to +40
Dimensions	-	5 RU x 8 TE x 195 mm

Digital Modular Headends

ProStreamer | DVB-S(2) → IPTV

Thanks to 4 satellite inputs per module, each module is able to receive the 4 satellite bands. The modules have 4 satellite tuners and a multiswitch inside to offer a fully flexible interconnection between the inputs and the tuners. All IPTV modules have 2 separate Ethernet ports: one for streaming output and one for configuration. This allows the user to separate the streaming traffic from the configuration, to avoid unauthorized access.



- ▶ 4 satellite tuners (reception of 4 transponders per module)
- ▶ 4 satellite inputs (4 satellite bands per module)
- ▶ distribute up to 16 programs per module
- ▶ ref. 5203: decode up to 16 programs per module with multi-service CAM (encoded programs from all 4 tuners can be routed through 1 CAM)
- ▶ easy configuration with built-in webserver
- ▶ remote access possibility via RMU ref. 5950

	5202		5203
Input: DVB-S(2)			
Number of inputs	-	4 with 4 active loop-through outputs (0 dB loss)	
Tuner	-	4 tuners (4 transponders)	
Frequency range	MHz	950-2150	
Level	dBm	-55 to -25	
Bandwidth	MHz	36	
Modulation	-	DVB-S(2): QPSK, 8-PSK DVB-S: QPSK	
LNB power (DC+tone)	V	0/13/18 + 22kHz DiSEqC®	
LNB current per input	mA	max. 250	
Output: IPTV			
Standard	-	IEEE 802.3 10/100 Base-T	
Protocol	-	Multicast IP/UDP	
Cl-slot	-	no	yes
Bitrate	Mbps	100	
Capacity	-	up to 16 simultaneous streams	
General			
Connectors	-	RF: 8 x "F" connector female Streaming: 1 x RJ-45 (Ethernet) Management: 1 x RJ-45 (Ethernet) DC: banana sockets	
Power supply	VDC	15	
Consumption	A	0,6	0,8
Operating temperature	°C	0 to +40	
Dimensions	-	5 RU x 8 TE x 195 mm	

Digital Modular Headends

ProStreamer | DVB-T → IPTV

J johansson

Many countries offer a nice bouquet of DVB-T programs, often free-to-air. With the **DVB-T** to **IPTV** modules, these programs can be distributed over the network via Ethernet. All modules have 4 DVB-T tuners, to receive 4 DVB-T multiplexes.



- ▶ 4 tuners allow reception of 4 multiplexes per module
- ▶ distribute up to 16 programs per module
- ▶ decode up to 16 programs per module with multi-service CAM
- ▶ easy configuration with built-in webserver
- ▶ remote access possibility via RMU ref. 5950

5210 | 5211

Input: DVB-T		
Number of inputs	-	1 with 1 active loop-through output (± 1 dB)
Tuner	-	4 tuners (4 multiplexes)
Frequency range	MHz	VHF: 174-230 UHF: 470-862
Level	dBm	-55 to -20
Bandwidth	MHz	6/7/8
Modulation	-	QPSK: 1/2, 2/3, 3/4, 5/6, 7/8 16-QAM: 1/2, 2/3, 3/4, 5/6, 7/8 64-QAM: 1/2, 2/3, 3/4, 5/6, 7/8
LNA power	V	0/5/12/24 (100 mA max)
Output: IPTV		
Standard	-	IEEE 802.3 10/100 Base-T
Protocol	-	Multicast IP/UDP
CI-slot	-	no yes
Bitrate	Mbps	100
Capacity	-	up to 16 simultaneous streams
General		
Connectors	-	RF: 2 x "F" connector female Streaming: 1 x RJ-45 (Ethernet) Management: 1 x RJ-45 (Ethernet) DC: banana sockets
Power supply	VDC	15
Consumption	A	0,5 0,7
Operating temperature	°C	0 to +40
Dimensions	-	5 RU x 8 TE x 195 mm

Digital Modular Headends

ProStreamer | AV → IPTV

The quad AV to IPTV module has 4 inputs, to distribute up to 4 analog video sources over the Ethernet network.



- ▶ 4 AV stereo inputs per module
- ▶ easy configuration with built-in webserver
- ▶ change important parameters: resolution, brightness, contrast, hue, saturation,...
- ▶ ideal solution for CCTV or near-VOD!
- ▶ remote access possibility via RMU ref. 5950

5230		
Input: CVBS (A/V)		
Number of inputs	-	4 x AV (CVBS)
Video processing	-	Conformance with IEC 13818-2 (MPEG2 video) and ISO/IEC 11172-3 (MPEG1 audio) standards
Video resolution	-	SIF: 352 x 288 SCDV: 480 x 576 HALF D1: 352 x 576 D1: 720 x 576 544: 544 x 576
Video bitrate	kbps	1500 to 7000 (Typ. 6000)
Audio volume	dB	-6 to +6 (Typ. 0)
Output: IPTV		
Standard	-	IEEE 802.3 10/100 Base-T
Protocol	-	Multicast IP/UDP
Bitrate	Mbps	100
Capacity	-	4 streams
General		
Connectors	-	Video input: 4 x CINCH Audio input: 4 x 3,5 mm jack Streaming: 1 x RJ-45 (Ethernet) Management: 1 x RJ-45 (Ethernet) DC: banana sockets
Power supply	VDC	15
Consumption	A	0,65
Operating temperature	°C	0 to +40
Dimensions	-	5 RU x 8 TE x 195 mm

Digital Modular Headends

ProStreamer | SD/HD Encoder

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NEW

The **SD/HD Encoder** is a digital head end encoder. It has 8 AV (CVBS) & 1 HD (HD-SDI) inputs. It provides 1 Ethernet IP streaming port and 1 Ethernet management port for system control & GUI.

5240

- ▶ 8 AV CVBS inputs with stereo or dual-mono audio
- ▶ 1 HD-SDI input with up to 4 embedded stereo or dual-mono audio channels
- ▶ easy configuration with built-in webserver
- ▶ change important parameters: brightness, contrast, saturation, hue, volume,...
- ▶ ideal solution for cable TV broadcast, CCTV or near-VOD,...



5240

Input: CVBS (A/V)

Number of inputs	-	8 x AV (CVBS)
Video compression	-	MPEG-2 MP@ML H.264 AVC MP@L3.0 Selectable in groups of 4
Video resolution	-	PAL: 720x576i@25 NTSC: 720x480i@29.97
Video encoding bitrate	Mbps	1 to 10 (step= 100 kbps)
Audio compression	-	MPEG-1 Layer II (MP2)
Audio sampling	kHz	32, 44.1, 48 (16bit sampling)
Audio encoding bitrate	kbps	64 up to 384

Input: HD-SDI (A/V)

Number of inputs	-	1 x AV (HD-SDI)
Video compression	-	H.264 AVC HP@L4.1
Video resolution	-	1920x1080i@25/29.97 1280x720p@50/59.94 Auto-detection
Video encoding bitrate	Mbps	3 to 20 (step= 100 kbps)
Audio compression	-	AAC
Audio sampling	kHz	48 (16bit sampling)
Audio encoding bitrate	kbps	AAC-LC : 64 up to 384 HE-AAC : 32 up to 288

Output: IPTV

Standard	-	Ethernet 100 / 1000 Base-T
Protocol	-	ARP, ICMP, DHCP
Bitrate	GbE	1
Capacity	-	9 streams

General

Connectors	-	<p><i>Front side:</i> HD-SDI Input : BNC Streaming: 1 x RJ-45 (Ethernet) Management: 1 x RJ-45 (Ethernet) DC: Banana sockets <i>Rear side:</i> CVBS SD Video Input: 8 x RCA Yellow SD Audio (R) Input: 8 x RCA Red SD Audio (L) Input: 8 x RCA White </p>
Power supply	VDC	15
Consumption	A	1,2
Operating temperature	°C	0 to +40 (Fan unit (ref. 5062ETH) is mandatory)
Dimensions	-	5 RU x 8 TE x 330 mm

Digital Modular Headends

Accessories | Power Supply Unit



5050ETH | 5050UKETH

- This power supply is rated to power a full 19 inch rack of IP streamers or up to 5 Transmodulators.

5050ETH | 5050UKETH*

Input voltage	VAC	90 to 264
Output voltage	VDC	15
Output power	W	150
Weight	kg	2
Dimensions	-	5 RU x 12 TE x 180 mm

*The 5050UKETH is delivered with a UK power plug.

NEW



5051ETH | 5051UKETH

- This power supply is rated to power a full 19 inch rack of Digital Modular Headend devices. The extra DC connectors allow to place this power supply anywhere in the 19 inch rack.

5051ETH | 5051UKETH*

Input voltage	VAC	90 to 264
Output voltage	VDC	15
Output power	W	300
Weight	kg	2,2
Dimensions	-	5 RU x 12 TE x 330 mm

*The 5051UKETH is delivered with a UK power plug.

Digital Modular Headends

Accessories | 19" Sub-Rack

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5060ETH

Number of slots	-	Up to 9 modules (+ 1 power supply unit)
Blank plates	-	8 blank plates mounted
Weight	kg	3,3
Dimensions	-	19" x 5 RU x 195 mm

5060ETH



NEW

5065ETH

Number of slots	-	Up to 9 modules (+ 1 power supply unit)
Blank plates	-	8 blank plates mounted
Weight	kg	4,55
Dimensions	-	19" x 5 RU x 367 mm

5065ETH

Accessories | Fan Unit

5062ETH | 5062UKETH

5062ETH 5062UKETH*		
Input voltage	VAC	90 to 264
Power consumption	VA	35
Weight	kg	4,9
Dimensions	-	19" x 2 RU x 155 mm

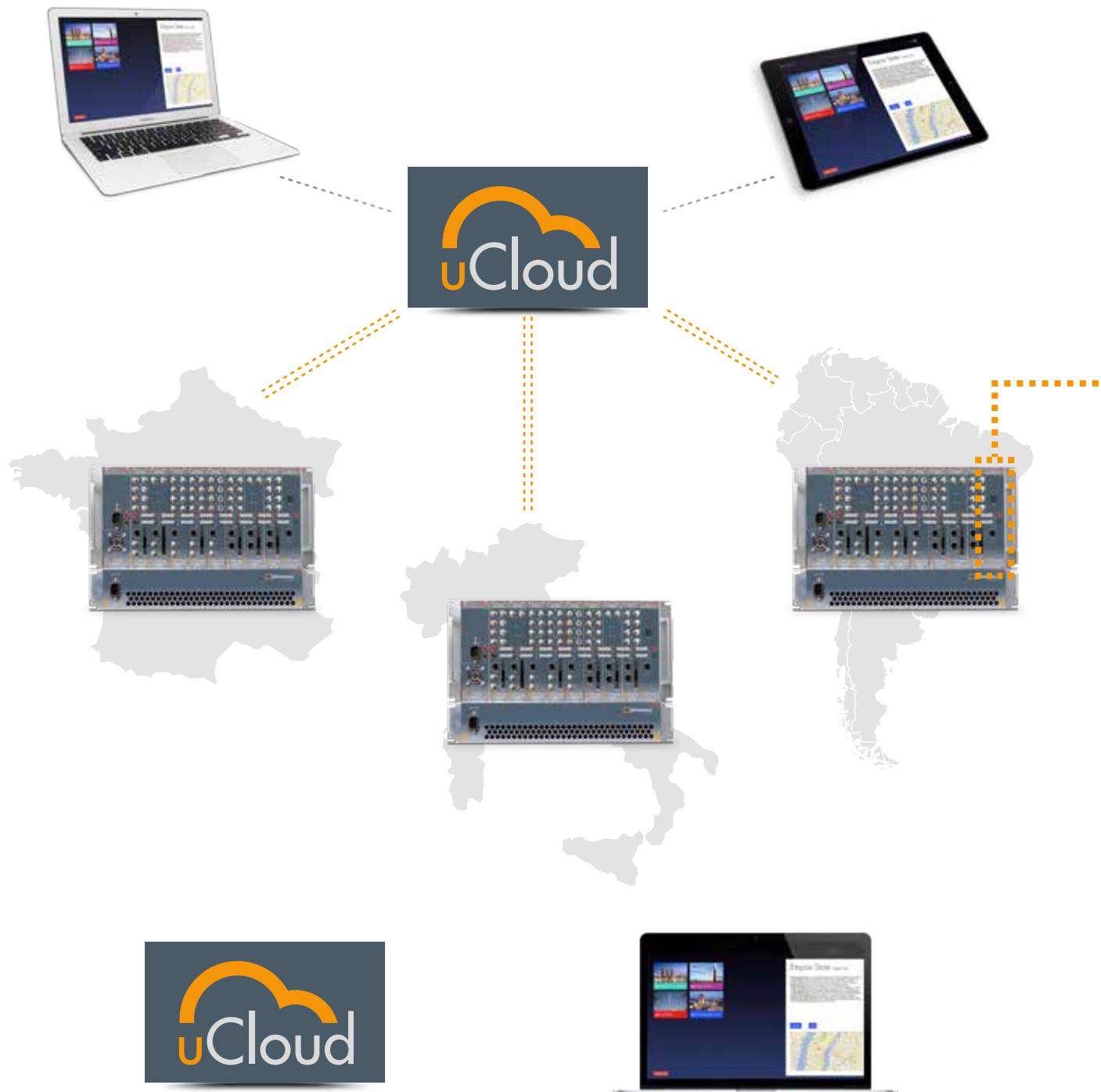


*The 5062UKETH is delivered with a UK power plug.

Digital Modular Headends

Remote Management System

NEW



Online platform

- ▶ Online driver library
- ▶ Available 24/7
- ▶ Multitenant architecture
- ▶ Always up to date
- ▶ Automatic device support
- ▶ Future proof

Centralized remote management tool

- ▶ Access all your systems from anywhere in the world
- ▶ Hosted solution: access your installation from every PC without installation
- ▶ Smart and bandwidth-efficient solution: HD screens, even with limited bandwidth
- ▶ Secure connection

Digital Modular Headends

Remote Management System



- ▶ very simple installation
- ▶ powerful configuration and monitoring tool with extended graphical user interface (embedded Universal User Interface)
- ▶ no network knowledge needed
- ▶ use our free application to manage all your installations remotely: google maps overview of all your installations, one button-connect to any installation, add pictures and comments regarding the installation...
- ▶ safe remote access with certificates and password authentication
- ▶ solve problems from wherever you are

5950



5950		
Connectors	-	2 x USB DC: banana sockets Control: 1 x RJ-45
LEDs	-	1 x alarm LED 1 x power LED 1 x status LED
Power Supply	VDC	15
Consumption	A	0,6
Dimensions	-	5RU x 8TE x 180 mm

The Remote Management Unit (RMU) enables any authenticated user to configure or monitor a specific headend remotely. The RMU is a very smart and powerful solution which connects with a server hosted by us and enables you to connect to any of your installations with any PC or Internet-connected device.

Setup of the unit is as simple as it gets:



Put the RMU in the 19" rack.



Connect the RMU to an Internet-connected switch, together with the DMH modules.



Connect the power.



Go to our hosted website, login and enter the unique code visible on the RMU.

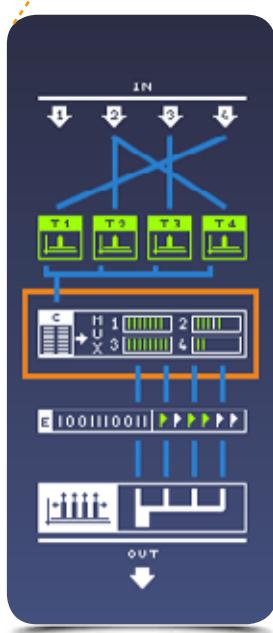


You can now connect to this module from wherever you are on any PC!



Digital Modular Headends

System Configurator



Rich and accessible user interface

- Import-export of settings
- Drag-and-drop functionality
- Status overview of your device
- Interactive dialogues and diagrams

System level management

- Automatic device discovery
- Overview of all devices in the system
- Direct remote connection on system level
- Direct device status overview
- Hybrid environment: supports configuration of Ethernet and coaxial devices

Digital Modular Headends

SAT>IP™ Multi Tuner SMATV Server

J johansson

NEW

SAT>IP™ is a revolutionary technology for the cost-effective distribution of satellite signals via in-home or private IP networks. The rack mountable SAT>IP™ multiswitch supports both dynamic and static operation; a combination of these modes is also possible.

In static mode the rack mountable SAT>IP™ multiswitch can receive signals from 4 satellite bands and multicast up to 32 channels on your private IP network to a large amount of clients.

In dynamic mode 32 clients can simultaneously watch every channel which is available on the 4 satellite bands.

5400



- ▶ 4 LNB inputs for Quattro or Quad LNB. If the LNB is not already powered use the 9930 for Quattro and Quad LNB
- ▶ 4 trunk outputs for cascading multiple server units
- ▶ support both static and dynamic operation
- ▶ streams satellite TV (SD and HD) and radio over IP
- ▶ configuration with built-in webserver

5400

Sat. input / Trunk output	-	4/4
Frequency	MHz	950 - 2150
Max. input level	dBµV	99
Min. input level	dBµV	51
Trunk loss	dB	5
Return loss in/out	dB	>10
Modulation	-	DVB-S(2): QPSK, 8-QPSK DVB-S: QPSK
Output	-	1 x RJ45 100 / 1000 Ethernet port
Users/channels	-	32
Protocol	-	SAT>IP V 1.2 compliant
Dynamic unicast	-	HTTP / RTSP
Static multicast	-	RTP
Power supply - mains	VAC	100 to 240 VAC, 50/60 Hz
Max. power consumption	W	40
Operating temperature	°C	0 to +50
Dimensions	mm	19" x 1RU x 400 mm

Digital Compact Headends

- ▶ Johansson introduces the range of Digital Compact Headends, known as "Colosseum". Already shortly after their introduction in Germany, these compact TV distribution stations were recommended by several magazines for their ease of use, compactness and most off all, powerful performance! And this was exactly the goal of the Johansson Colosseum products: A plug&play solution to provide TV distribution in medium sized buildings. A key aspect of being plug&play is that the devices are preprogrammed for a specific region, enabling the installer to have a TV image in less than 2 minutes! The Colosseum is the perfect solution for hotels, motels, recreation parks, hospitals,... to replace the old analogue TV distribution system with a fully digital one!



INDEX

DIGITAL COMPACT HEADEND

- Colosseum DVB-T CI 24
 - Colosseum DVB-T 26
 - Colosseum DVB-C 28
 - Colosseum AV 30
-

Digital Compact Headends

Colosseum DVB-T CI

The Colosseum DVB-T CI (ref. 8501) is a plug&play compact headend for digital TV. The device is preprogrammed to distribute satellite programs in DVB-T (COFDM). Because all services and settings are preconfigured, the only thing you have to do is plug in the cables, and scan the TV's.

8501



DVB-T®

- ▶ plug&play compact headend
- ▶ 8 transponders / 4 satellite bands / 8 COFDM multiplexes
- ▶ 2 CI slots: decode up to 32 encoded services
- ▶ preconfigured
- ▶ changes to the default settings can be made with a built-in webGUI
- ▶ innovative and compact design



Check out the website for more configurations.

NEW

8506



DVB-T®

- ▶ plug&play compact headend
- ▶ 4 transponders / 4 satellite bands / 4 COFDM multiplexes
- ▶ 1 CI slot: decode up to 16 encoded services
- ▶ innovative and compact design

Digital Compact Headends

Colosseum DVB-T CI



	8506		8501
Input: QPSK (DVB-S2)			
Number of inputs	-	4 satellite bands	
Tuner	-	4 tuners (4 transponders)	8 tuners (8 transponders)
Frequency range	MHz	950-2150	
Level	dBm	-55 to -25	
Bandwidth	MHz	36	
Modulation	-	DVB-S2: QPSK, 8-PSK DVB-S: QPSK	
LNB power (DC+tone)	V	0/13/18 + 22kHz DiSEqC®	
LNB current per input	mA	max. 250	
Output: COFDM (DVB-T)			
Number of outputs	-	1	
Frequency range	MHz	47-862 (VHF-UHF)	
Multiplexes	-	4 adjacent	8 adjacent
Channel bandwidth	MHz	6/7/8	
Modulation	-	QPSK, 16-QAM, 64-QAM	
OFDM mode	-	2K	
Forward Error Correction (FEC)	-	1/2, 2/3, 3/4, 5/6, 7/8	
Guard interval	-	1/4, 1/8, 1/16, 1/32	
Modulation Error Rate (MER)	dB	40	
Spectral inversion	-	yes	
Output level	dBµV	68 to 83 adjustable	
CI-slot	-	1 slot	2 slots
Capacity	-	up to 32 programs	up to 64 programs
General			
Connectors	-	RF: 10 x "F" connector female Management: 1 x RJ-45 (Ethernet) DC: banana sockets	RF: 20 x "F" connector female Management: 2 x RJ-45 (Ethernet) DC: banana sockets
Power supply	VDC	15	
Consumption	A	1,5	3
Operating temperature	°C	0 to +40	
Dimensions	mm	280 x 260 x 150	

Digital Compact Headends

Colosseum DVB-T

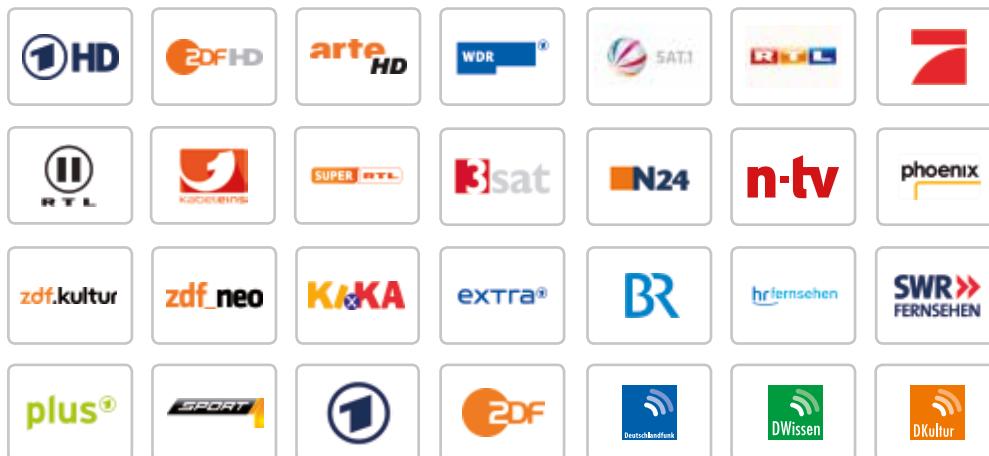
The Colosseum DVB-T (ref. 8500D) is a plug&play compact headend for digital TV. The device is preprogrammed to distribute 28 German satellite programs in DVB-T (COFDM). Because all services and settings are preconfigured, the only thing you have to do is plug in the cables, and scan the TV's. This makes it an ideal solution to replace the old analogue headends during or after a switch-off from analog to digital.

8500D

- ▶ plug&play compact headend
- ▶ 8 transponders / 4 satellite bands / 8 COFDM multiplexes
- ▶ changes to the default settings can be made with a built-in webGUI
- ▶ innovative and compact design
- ▶ preconfigured with 28 German programs



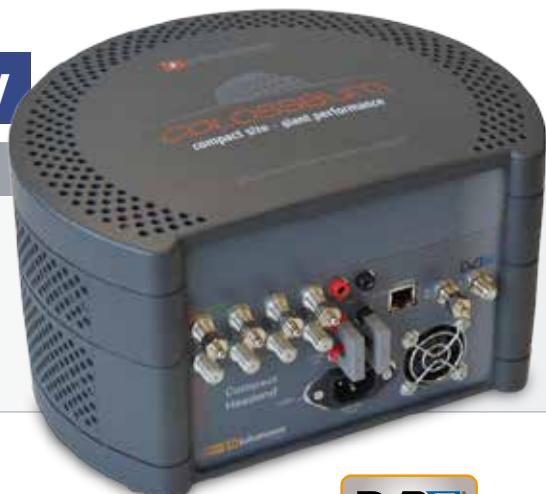
Example of German presettings.



NEW

8505

- ▶ plug&play compact headend
- ▶ 4 transponders / 4 satellite bands / 4 COFDM multiplexes
- ▶ unit is easily programmable for about 14 presets
- ▶ innovative and compact design



Digital Compact Headends

Colosseum DVB-T



Digital Compact
Headends

	8505		8500D
Input: QPSK (DVB-S2)			
Number of inputs	-	4 satellite bands	
Tuner	-	4 tuners (4 transponders)	8 tuners (8 transponders)
Frequency range	MHz	950-2150	
Level	dBm	-55 to -25	
Bandwidth	MHz	36	
Modulation	-	DVB-S2: QPSK, 8-PSK DVB-S: QPSK	
LNB power (DC+tone)	V	0/13/18 + 22kHz DiSEqC®	
LNB current per input	mA	max. 250	
Output: COFDM (DVB-T)			
Number of outputs	-	1	
Frequency range	MHz	47-862 (VHF-UHF)	
Multiplexes	-	4 adjacent	8 adjacent
Channel bandwidth	MHz	6/7/8	
Modulation	-	QPSK, 16-QAM, 64-QAM	
OFDM mode	-	2K	
Forward Error Correction (FEC)	-	1/2, 2/3, 3/4, 5/6, 7/8	
Guard interval	-	1/4, 1/8, 1/16, 1/32	
Modulation Error Rate (MER)	dB	40	
Spectral inversion	-	yes	
Output level	dBµV	68 to 83 adjustable	
Capacity	-	up to 32 programs	up to 64 programs (preprogrammed with 28 services)
General			
Connectors	-	RF: 10 x "F" connector female Management: 1 x RJ-45 (Ethernet) DC: banana sockets	RF: 20 x "F" connector female Management: 2 x RJ-45 (Ethernet) DC: banana sockets
Power supply	VDC	15	
Consumption	A	1,5	3
Operating temperature	°C	0 to +40	
Dimensions	mm	280 x 260 x 150	

Digital Compact Headends

Colosseum DVB-C

The Colosseum DVB-C (ref. 8550D) is a plug&play compact headend for digital TV. The device is preprogrammed to distribute 43 German satellite programs in DVB-C (QAM). Because all services and settings are preconfigured, the only thing you have to do is plug in the cables, and scan the TV's. This makes it an ideal solution to replace the old analogue headends during or after a switch-off from analog to digital.

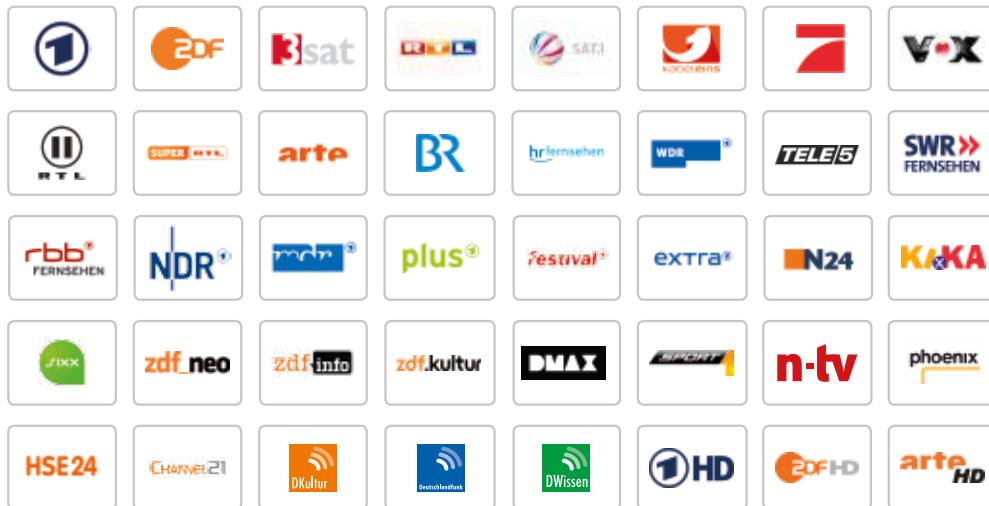
8550D

- ▶ plug&play compact headend
- ▶ 8 transponders / 4 satellite bands / 8 QAM multiplexes
- ▶ changes to the default settings can be made with a built-in webGUI
- ▶ innovative and compact design
- ▶ preconfigured with 43 German programs



Example of German presettings.

DVB-C



YouTube
Broadcast Yourself™



NEW

8555

- ▶ plug&play compact headend
- ▶ 4 transponders / 4 satellite bands / 4 QAM multiplexes
- ▶ unit is easily programmable for about 20 presets
- ▶ innovative and compact design



DVB-C

Digital Compact Headends

Colosseum DVB-C



Input: QPSK (DVB-S2)

	8555		8550D
Input: QPSK (DVB-S2)			
Number of inputs	-	4 satellite bands	
Tuner	-	4 tuners (4 transponders)	8 tuners (8 transponders)
Frequency range	MHz	950-2150	
Level	dBm	-55 to -25	
Bandwidth	MHz	36	
Modulation	-	DVB-S2: QPSK, 8-PSK DVB-S: QPSK	
LNB power (DC+tone)	V	0/13/18 + 22kHz DiSEqC®	
LNB current per input	mA	max. 250	

Output: QAM (DVB-C)

Number of outputs	-	1	
Frequency range	MHz	47-862 (VHF-UHF)	
Multiplexes	-	4 adjacent	8 adjacent
Channel bandwidth	MHz	6/8	
Modulation	-	6 MHz: 64-QAM 8 MHz: 64-QAM/256-QAM	
Modulation Error Rate (MER)	dB	40	
Spectral inversion	-	yes	
Output level	dBpV	68 to 83 adjustable	
Capacity	-	up to 32 programs	up to 64 programs (preprogrammed with 43 services)

General

Connectors	-	RF: 10 x "F" connector female Management: 1 x RJ-45 (Ethernet) DC: banana sockets	RF: 20 x "F" connector female Management: 2 x RJ-45 (Ethernet) DC: banana sockets
Power supply	VDC	15	
Consumption	A	1,5	3
Operating temperature	°C	0 to +40	
Dimensions	mm	280 x 260 x 150	

Digital Compact Headends

Colosseum AV

NEW

The Johansson Colosseum AV is the perfect solution to distribute AV sources (DVD, set-top boxes, PC, Camera,...) over the coaxial distribution network in DVB-T (COFDM) format. The Colosseum AV is a compact and plug&play solution.

8530 | 8530 UK
8535 | 8535 UK

- ▶ ref. 8530/8530UK: distribute up to 8 AV sources over the coaxial network in digital (DVB-T) format
- ▶ ref. 8535/8535UK: distribute up to 4 AV sources over the coaxial network in digital (DVB-T) format
- ▶ compact and innovative design
- ▶ easy plug&play installation
- ▶ edit all kinds of parameters: LCN numbers (configurable for all countries), resolution, brightness, aspect ratio, hue, saturation, ...
- ▶ configure with built-in webGUI



8535/8535UK*	8530/8530UK*		
Input: CVBS (A/V)			
Number of inputs	-	4 x AV (CVBS)	8 x AV (CVBS)
Video processing	-	Conformance with IEC 13818-2 (MPEG2 video) and ISO/IEC 11172-3 (MPEG1 audio) standards	
Video resolution	-	SIF: 352 x 288 SVCD: 480 x 576 HALF D1: 352 x 576 D1: 720 x 576 544: 544 x 576	
Video bitrate	kbps	1500 to 7000 (Typ. 6000)	
Audio volume	dB	-6 to +6 (Typ. 0)	
Output: COFDM (DVB-T)			
Number of outputs	-	1	
Frequency range	MHz	47-862 (VHF-UHF)	
Multiplexes	-	2 adjacent	4 adjacent
Channel bandwidth	MHz	6/7/8	
Modulation	-	QPSK, 16-QAM, 64-QAM	
OFDM mode	-	2K	
Forward Error Correction (FEC)	-	1/2, 2/3, 3/4, 5/6, 7/8	
Guard interval	-	1/4, 1/8, 1/16, 1/32	
Modulation Error Rate (MER)	dB	40	
Spectral inversion	-	yes	
Output level	dBpV	68 to 83 adjustable	
Capacity	-	4 Audio-Video services	8 Audio-Video services
General			
Connectors	-	RF: 2 x "F" connector female Video input: 4 x CINCH Audio input: 4 x 3,5 mm jack Management: 1 x RJ-45 (Ethernet) DC: banana sockets	RF: 4 x "F" connector female Video input: 8 x CINCH Audio input: 8 x 3,5 mm jack Management: 2 x RJ-45 (Ethernet) DC: banana sockets
Power supply	VDC	15	
Consumption	A	1	2
Operating temperature	°C	0 to +40	
Dimensions	mm	280 x 260 x 150	

*The 8530UK is delivered with a UK power plug.

Digital Compact Headends

Colosseum AV

J johansson

AV - sources input

DVB-T coaxial
distribution network



Digital Compact
Headends

Profilers

- The well-known Profilers are a range of programmable filter-amplifiers. The signals coming from multiple antennas can be combined, filtered, amplified, to offer the best possible signal for distribution of TV throughout the building. The profilers are very flexible and can be configured to your specific needs. We offer a broad range of profiler products, to fulfill your specific needs.



INDEX | PROFILERS

- Super Profiler | Super Profiler SAT 34
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profilers

Super Profiler | Super Profiler SAT

The next generation profilers, commercialized as Profiler PLUS and Super Profiler, offer even better performance than their predecessors! Thanks to a new, in-house developed technology, the selectivity of the filters has noticeably increased. Because the new profilers have 4 UHF inputs, and 10 or 12 highly selective filters (depending on the model), even the most exotic situations are covered.

The Super Profilers have two built-in super selective single-channel filters with a selectivity of 30 dB at only 1 MHz. A very attractive feature is the frequency conversion: A multiplex can be converted to another frequency channel, offering you the possibility to manage your own frequency plan. This can be done by removing unwanted interferers, and moving the multiplexes of interest to other frequencies to avoid saturation or interference.

Configuration is done with a standalone remote control unit (ref. 6565).

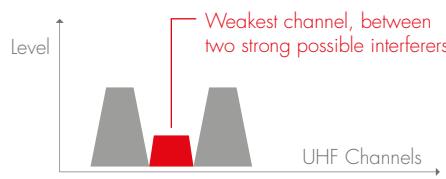


6630 | 6630 UK

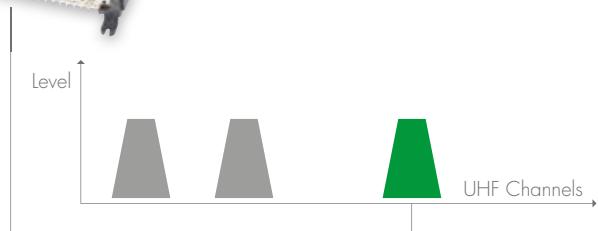
- ▶ 7/8 inputs: 4 x UHF/BIFM/BIII+DAB/AUX/SAT (6631/6631 UK only)
- ▶ highly selective filters thanks to new filter technology (LTE proof)
- ▶ 2 super selective single channel filters: 30 dB @ 1 MHz
- ▶ 8 UHF filter clusters (30 dB @ 16 MHz): 1 to 7 channels bandwidth
- ▶ frequency conversion functionality
- ▶ high output level: >120 dB_pV
- ▶ 2 programmable outputs
- ▶ high-efficiency and ultra-reliable power supply (detachable)
- ▶ easy programming by dedicated control unit (ref. 6565)
- ▶ remote configuration possible
- ▶ 6630 UK/6631 UK are delivered with UK power cord



6631 | 6631 UK

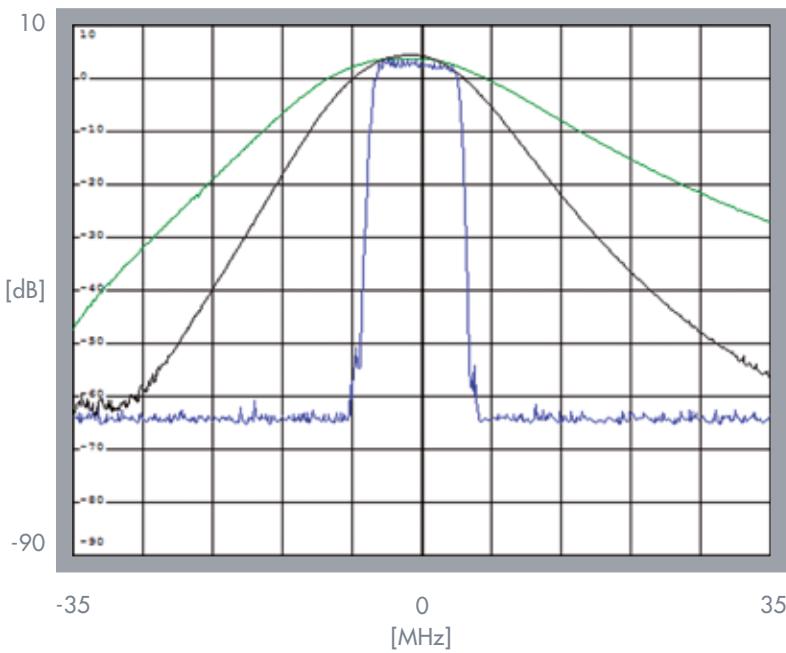


FREQUENCY CONVERSION FUNCTIONALITY



		6630/6630 UK					6631/6631 UK				
INPUTS	-	BII-FM	BIII/DAB	AUX	UHF1	UHF2	UHF3	UHF4	SAT		
Frequency range	MHz	47-68	174-240	47-862	470-862			950-2300	-		
		88-108									
Filter bandwidth	MHz	-			8 x cluster filter: 8-56 (1-7 ch.) 2 x super filter: 8 (single channel)			-	-		
Gain	dB	35	40	30	60			45	-		
		20	20	20	30						
Gain adjustment	dB	-			-			10	-		
Slope adjustment	dB	-			+10 to -10			-	-		
General UHF level adjustment	dB	-			-			-	-		
Noise figure	dB	7	5	15	6			9	-		
					-						
Max. input level	dB _{pV}	80	80	100	105			90	-		
					122						
Max. output level*	dB _{pV}	118	118	122	122			118	-		
					-						
Selectivity	-	-			30 dB/1 MHz (2 x super filters) 30 dB/16 MHz (8 x cluster filters)			SAT/TERR.: >30 dB TERR./SAT: >25 dB			
Return loss	dB	>10			-			-	-		
LNA remote voltage: 5/12/24 V LNA remote current	-	-	yes 100 mA	-	yes 100 mA total			0/13/18V and 0/22 kHz 300 mA			
					-						
Outputs	-	2 x TV output 1 x Test output: -30 dB (12 VDC)			1 x TV output 1 x TV-SAT output 1 x Test output: -30 dB (12 VDC)			-	-		
Configuration	-	PC (UUI software) or Control Unit (ref. 6565)			-			-	-		
Power supply	-	230-240 V~			-			-	-		
Operating temperature	°C	-			-5 to +50			-	-		
Dimensions	mm	325 x 220 x 60			-			-	-		

*1 output active (2 outputs active: -5dB) | Terr.: -60 dBc/IM3 | SAT: -35 dBc/IM3



SUPER SELECTIVE FILTERS

- ▶ First generation profiler: 15 dB @ 16 MHz
- ▶ Normal single-channel filter: 30 dB @ 16 MHz
- ▶ Super filter: 30 dB @ 1 MHz

profilers

Profiler Plus



remote

6620 | 6620 UK

- ▶ 7 inputs: 4 x UHF/BIFM/BIII+DAB/AUX
- ▶ highly selective filters thanks to new filter technology (LTE proof)
- ▶ 10 (ref. 6620/6620 UK)/12 (ref. 6622/6622 UK) UHF filter clusters (30 dB @ 16 MHz): 1 to 7 channels bandwidth
- ▶ high output level: >120 dB_pV
- ▶ 2 programmable outputs
- ▶ high-efficiency and ultra-reliable power supply (detachable)
- ▶ easy programming by dedicated control unit (ref. 6565)
- ▶ remote configuration possible
- ▶ 6620 UK/6622 UK are delivered with UK power cord



6622 | 6622 UK



6620/6620 UK | 6622/6622 UK

INPUTS	-	BIFM	BIII/DAB	AUX	UHF1	UHF2	UHF3	UHF4
Frequency range	MHz	47-68 88-108	174-240	47-862		470-862		
Number of UHF cluster filters	-		-		6620/6620 UK: 10 x cluster filter 6622/6622 UK: 12 x cluster filter			
UHF cluster filter bandwidth			-		1-7 Ch. (8-56 MHz)			
Gain	dB	35	40	30		60		
Gain adjustment	dB	20	20	20		30		
General UHF level adjustment	dB	-			+10 to -10			
Noise figure	dB	7	5	15		6		
Max. input level	dB _p V	80	80	100		105		
Max. output level*	dB _p V	118	118	122		122		
Selectivity	dB/Ch±2	-				30		
Return loss	dB			>10				
LNA remote voltage: 5/12/24 V LNA remote current: 100 mA total	-	-	yes	-		yes		
Outputs	-			2 x TV output 1 x Test output: -30 dB (12 VDC)				
Configuration	-			PC (UU1 software) or Control Unit (ref. 6565)				
Power supply	-			230-240 V~				
Operating temperature	°C			-5 to +50				
Dimensions	mm			325 x 220 x 60				

*1 output active (2 outputs active: -5dB) | Terr.: -60 dBc/IM3

The Profiler PLUS headends are also available with satellite input. This offers a very flexible solution, where the profiler is capable of handling up to 4 UHF antennas, 3 VHF antennas and one LNB. Thanks to the dedicated control unit (ref. 6565), configuration of the profilers is easy.



6621 | 6621 UK



6623 | 6623 UK

6621/6621 UK | 6623/6623 UK

INPUTS	-	BI-FM	BIII/DAB	AUX	UHF1	UHF2	UHF3	UHF4	SAT							
Frequency range	MHz	47-68		174-240	47-862	470-862			950-2300							
		88-108														
Number of UHF cluster filters	-	-			6621/6621 UK: 10 x cluster filter 6623/6623 UK: 12 x cluster filter			-								
		-			1-7 Ch. [8-56 MHz]			-								
Gain	dB	35	40	30	60			45								
	dB	20	20	20	30			20								
Slope adjustment	dB	-			-			10								
	dB	-			+10 to -10			-								
Noise figure	dB	7	5	15	6			9								
	dB	80	80	100	105			90								
Max. input level	dB _{pV}	118	118	122	122			118								
	dB _{pV}	-			30			SAT/TERR.: >30 TERR./SAT: >25								
Selectivity	dB/Ch±2	-			30			-								
	dB	-			>10			-								
LNA remote voltage: 5/12/24 V LNA remote current	-	-	yes 100 mA	-	yes 100 mA total	0/13/18V and 0/22 kHz 300 mA										
	-	-			1 x TV output 1 x TV-SAT output 1 x Test output: -30 dB (12 VDC)											
Outputs	-	-			PC (UUI software) or Control Unit (ref. 6565)											
	-	-			230-240 V~											
Configuration	-	-			-5 to +50											
	-	-			325 x 220 x 60											

*1 output active (2 outputs active: -5dB) | Terr.: -60 dBc/IM3 | SAT: -35 dBc/IM3

profilers

Profiler

All profiler models have an automatic signal level equalizer, helping you to find the optimal gain for each filter. The profilers are equipped with a display, indication LEDs and a rotary button to make the configuration an easy task. Thanks to our memory-stick (ref. 6604), settings can easily be transferred from one unit to another. To avoid unauthorized people changing the settings, all Profiler products can be locked with a security code.

6600 | 6600A | 6600UK

- ▶ 6 inputs: BI-FM/BIII/VHF-UHF/3 x UHF
(UK version : FM/BIII/VHF-UHF/3 x UHF)
- ▶ 10 UHF programmable clusters from 1 to 7 channels bandwidth.
- ▶ high gain (5.5 dB) and high power (118 dB_pV)
- ▶ 24 V remote power on UHF and VHF-UHF inputs (12V for 6600UK and 6600A)
- ▶ VHF-UHF split band amplifier with inter-stage attenuators
- ▶ -30 dB test output



6600 | 6600A | 6600UK

Inputs	-	BI-FM	BIII/DAB	VHF-UHF			UHF1	UHF2	UHF3			
Frequency range	MHz	47-108**	174-240	47-240 + 470-862			470-862					
Filter bandwidth	-	-			1-7 Ch. (8-56 MHz)							
Cluster configuration	-	-			2	8	0	2	7			
		-			2	7	1	2	5			
Gain	dB	35	40	40			55					
Gain adjustment	dB	20	20	20			30					
General UHF level adjustment	dB	-			+ 10 to -9							
Noise figure	dB	5	5	5			6					
Max. input level	dB _p V	75	85	80			105					
Max. output level*	dB _p V	115	115	VHF: 116	UHF: 118		118					
Selectivity	dB/Ch±2	-			15							
Return loss	dB	>10										
LNA remote voltage	V	-			24***							
LNA remote current	A	-		100 mA total								
Outputs	-	1 x TV output 1 x Test output: -30 dB										
Data transfer	-	DSUB9 connector										
Power supply	-	230-240 V~ / 15 VDC / 35 VA										
Operating temperature	°C	-5 to +50										
Dimensions	mm	265 x 220 x 95										

*Terr.: -60 dBc/IM3

**6600UK: 88-108MHz

***6600A/6600UK: 12V

The Profiler VHF is based on the normal Profiler, but offers 2 independent BIII/DAB inputs, and 2 programmable BIII/DAB filter clusters.



- ▶ 6 inputs : BI-FM/2 x BIII/3 x UHF
- ▶ 8 UHF programmable clusters from 1 to 7 channels bandwidth
- ▶ 2 BIII programmable clusters from 1 to 4 channels bandwidth
- ▶ high gain (55 dB) and high power (118 dB_{pV})
- ▶ 24 V remote power on BIII and UHF inputs
- ▶ VHF-UHF split band amplifier with inter-stage attenuators
- ▶ -30 dB test output

6603															
Inputs	-	BI-FM	BIII/DAB 1	BIII/DAB 2	UHF1	UHF2	UHF3								
Frequency range	MHz	47-108	174-240	174-240	470-862										
Filter bandwidth	-	-	1-4 Ch. (7-28 MHz)	1-4 Ch. (7-28 MHz)	1-7 Ch. (8-56 MHz)										
Cluster configuration	-	-			2	6	0								
					2	5	1								
					2	3	3								
Gain	dB	35	40	40	55										
Gain adjustment	dB	20	30	30	30										
General UHF level adjustment	dB	-	+10 to -9												
Noise figure	dB	5	5	5	6										
Max. input level	dB _{pV}	75	75	80	105										
Max. output level*	dB _{pV}	112	100	100	118										
Selectivity	dB/Ch±2	28	25	25	15										
Return loss	dB	>10													
LNA remote voltage	V	-	24												
LNA remote current	A	-	100 mA total												
Outputs	-	1 x TV output 1 x Test output: -30 dB													
Data transfer	-	DSUB9 connector													
Power supply	-	230-240 V~ / 15 VDC / 35 VA													
Operating temperature	°C	-5 to +50													
Dimensions	mm	265 x 220 x 95													

*Terr.: -60 dBc/IM3

profilers

Profiler Lite 10

The Profiler Lite devices are a slimmed down version of the basic 6600 Profiler, offering the same flexibility, but a lower gain, less filter clusters and a lower number of inputs. These are ideal for smaller buildings, where the high gain of the 6600 Profiler is not needed.

6601 | 6601A | 6601UK

- ▶ 5 inputs : BI-FM/BIII/3 x UHF
(UK version: FM/BIII/3 x UHF)
- ▶ 10 UHF programmable clusters from 1 to 7 channels bandwidth
- ▶ medium gain: 45 dB
- ▶ 24 V remote power on UHF inputs (12V for 6601UK and 6601A)
- ▶ VHF-UHF split band amplifier with inter-stage attenuators
- ▶ -30 dB test output



6601 | 6601A | 6601UK

Inputs	-	BI-FM	BIII/DAB	UHF1	UHF2	UHF3
Frequency range	MHz	47-108	174-240	470-862		
Filter bandwidth	-	-	-	1.7 Ch. (8.56 MHz)		
Cluster configuration	-	-	-	2	8	0
				2	7	1
				2	5	3
Gain	dB	35	40	45		
Gain adjustment	dB	20	20	30		
General UHF level adjustment	dB	-	-	+10 to -9		
Noise figure	dB	5	5	6		
Max. input level	dB μ V	75	80	105		
Max. output level*	dB μ V	115	115	110		
Selectivity	dB/Ch±2	-	-	15		
Return loss	dB	-	-	>10		
LNA remote voltage	V	-	-	24 ***		
LNA remote current	A	-	-	100 mA total		
Outputs	-	-	-	1 x TV output 1 x Test output: -30 dB		
Data transfer	-	-	-	DSUB9 connector		
Power supply	-	-	-	230-240 V~ / 15 VDC / 30 VA		
Operating temperature	°C	-	-	-5 to +50		
Dimensions	mm	-	-	265 x 220 x 95		

*Terr.: -60 dBc/IM3

**6601UK: 88-108MHz

***6601A/6601UK: 12V



- ▶ 4 inputs : BI-FM/BIII/2 x UHF
- ▶ 8 UHF programmable clusters from 1 to 7 channels bandwidth
- ▶ medium gain: 45 dB
- ▶ 24 V remote power on UHF inputs
- ▶ VHF-UHF split band amplifier with inter-stage attenuators
- ▶ -30 dB test output

6606					
Inputs	-	BI-FM	BIII/DAB	UHF1	UHF2
Frequency range	MHz	47-108	174-240	470-862	
Filter bandwidth	-		-	1-7 Ch. (8-56 MHz)	
Cluster configuration	-		-	8 7 5	0 1 3
Gain	dB	35	40	45	
Gain adjustment	dB	20	20	30	
General UHF level adjustment	dB		-	+10 to -9	
Noise figure	dB	5	5	6	
Max. input level	dB _p V	75	80	105	
Max. output level*	dB _p V	115	115	110	
Selectivity	dB/Ch±2		-	15	
Return loss	dB		>10		
LNA remote voltage	V	-		24	
LNA remote current	A	-		100 mA total	
Outputs	-		1 x TV output 1 x Test output: -30 dB		
Data transfer	-		DSUB9 connector		
Power supply	-		230-240 V~ / 15 VDC / 30 VA		
Operating temperature	°C		-5 to +50		
Dimensions	mm		265 x 220 x 95		

*Terr.: -60 dBc/IM3

profilers

Profiler SAT+ | Profiler SAT

In some situations the roof-top terrestrial antennas are accompanied by a satellite antenna, and both terrestrial and satellite signals have to be combined on the same coaxial cable for distribution throughout the building. The Profiler SAT series is the ideal product for these situations, by extending the normal Profiler with a satellite input.

- ▶ 1 SAT input + 6 Terrestrial inputs : BI-FM/BIII/VHF-UHF/3 x UHF
- ▶ 2 outputs: TV/TV-SAT
- ▶ 10 UHF programmable clusters from 1 to 7 channels bandwidth
- ▶ VHF-UHF-SAT split band amplifiers with inter-stage attenuators
- ▶ high gain (50 dB) and high output power (110 dB μ V)
- ▶ 0-13-18 V / 0-22 kHz remote power for LNB
- ▶ VHF-UHF split band amplifier with inter-stage attenuators
- ▶ -30 dB test output

Profiler SAT+ | 6605



Profiler SAT | 6602



- ▶ 1 SAT input + 6 Terrestrial inputs : BI-FM/BIII/VHF-UHF/3 x UHF
- ▶ 10 UHF programmable clusters from 1 to 7 channels bandwidth
- ▶ VHF-UHF-SAT split band amplifiers with inter-stage attenuators
- ▶ high gain (5.5 dB) and high output power (116 dB μ V)
- ▶ 0-13-18 V / 0-22 kHz remote power for LNB
- ▶ VHF-UHF split band amplifier with inter-stage attenuators
- ▶ -30 dB test output

6602 | 6605

INPUTS	-	BI-FM	BIII/DAB	VHF-UHF	UHF1	UHF2	UHF3	SAT
Frequency range	MHz	47-108	174-240	47-240 + 470-862		470-862		950-2300
Filter bandwidth	-				1-7 Ch. (8-56 MHz)			-
Cluster configuration	-				2	8	0	
					2	7	1	
					2	5	3	
Gain (ref. 6602)	dB	35	40	40		55		40
Gain (ref. 6605)	dB	30	35	35		50		40
Gain adjustment	dB	20	20	20		30		20
Slope adjustment	dB							9
General UHF level adjustment	dB		-		+10 to -9			-
Noise figure	dB	5	5	5		6		8
Max. input level	dB μ V	75	80	80		105		90
Max. output level (ref. 6602)*	dB μ V	115	115	VHF: 116 - UHF: 116		116		116
Max. output level (ref. 6605)*	dB μ V	112	112	VHF: 113 - UHF: 113		110		116
Selectivity	dB/Ch±2		-		15			SAT/TERR.: >30 TERR./SAT: >25
Return loss	dB				>10			
LNA/LNB remote voltage	V	-			24			0/13/18V and 0/22 kHz
LNA/LNB remote current	A	-			100 mA total			300 mA
Outputs (ref. 6602)	-				1 x TV-SAT output 1 x Test output: -30 dB			
Outputs (ref. 6605)	-				1 x TV output 1 x TV-SAT output 1 x Test output: -30 dB			
Data transfer	-				DSUB9 connector			
Power supply	-				230-240 V~ / 15 VDC / 45 VA			
Operating temperature	°C				-5 to +50			
Dimensions	mm				265 x 220 x 95			

*Terr.: -60 dBc/IM3 | SAT: -35 dBc/IM3

In situations where a medium gain (in the order of 45 dB) is sufficient, and the high number of antenna inputs is not needed, the Profino could be the ideal solution! The Profino is more compact than a normal Profiler, and apart from the reduced number of inputs, filter clusters and gain, the operation is identical to the other Profilers.

- ▶ 4 inputs : BI-FM , BIII / DAB and 2 x UHF
- ▶ 5 UHF clusters from 1 to 7 channels bandwidth
- ▶ BIII/ DAB input with 1 or 4 channels bandwidth filter
- ▶ BI-FM input for BI or FM or BI + FM
- ▶ high UHF input levels (up to 105 dB_{pV})
- ▶ selectable remote power (12/24V) on BIII and UHF inputs
- ▶ -30 dB test output

Profino | 6610



Profino Plus | 6611

- ▶ 4 inputs : FM, BIII / DAB and 2 x UHF
- ▶ 6 UHF clusters from 1 to 7 channels bandwidth
- ▶ BIII/ DAB input with 1 or 4 channels bandwidth filter
- ▶ BI-FM input for BI or FM or BI + FM
- ▶ high UHF input levels (up to 105 dB_{pV})
- ▶ selectable remote power (12/24V) on BIII and UHF inputs
- ▶ -30 dB test output

Inputs	-	BI-FM	BIII/DAB	UHF1	UHF2
Frequency range	MHz	47-108	174-240	470-862	
Filter bandwidth	-	-	1 or 4 Ch. (7 or 28 MHz)	1-7 Ch. (8-56 MHz)	
Cluster configuration	-	47-68 MHz (BI) 88-108 MHz (FM) 47-108 MHz (BI+FM)	1 channel or 4 channels	3 4 5	2 1 0

6610 6611UK	Frequency range	MHz	88-108	174-240	470-862
	Filter bandwidth	-	-	-	1-7 Ch. (8-56 MHz)
	Cluster configuration	-	-	-	4 3 6 2 3 0

6610 6611UK 6611 6611UK	Gain	dB	35	35	45
	Gain adjustment	dB	20	20 (6611)/30 (6610)	30
	Noise figure	dB	5	5	6
	Max. input level	dB _{pV}	75	85	110
	Max. output level*	dB _{pV}	115	110	110
	Selectivity	dB/Ch±2	20	30	15
	Return loss	dB		>10	
	LNA remote voltage	V	-	12/24	12/24
	LNA remote current	A	-	100 mA in total	
	Outputs	-		1 x TV output 1 x Test output: -30 dB	
	Data transfer	-		DSUB9 connector	
	Power supply	-		230-240 V~ / 12 VDC / 20 VA	
	Operating temperature	°C		-5 to +50	
	Dimensions	mm		231 x 185 x 53	

*Terr.: -60 dBc/IM3

profilers

4 IF Channel Processor

The 6520 offers 4 super-selective SAW filters in one compact sized zamak diecast housing. These filters can be used to convert 4 digital terrestrial channels to another frequency in the UHF band. Of course it can also be used as a super-selective single-channel filter in case a normal UHF filter is not sufficient (e.g. strong interference from an LTE source, or adjacent channel interference).

The 6520 can also be used as an extension with an existing Profiler Plus or Super Profiler. By connecting the 6520 to the AUX input of the Profiler, 4 frequency converting SAW filters are added to the system. And of course, it is also possible to interconnect several 6520's to provide more frequency converting single-channel filters.

The 6520 can be controlled by means of a remote control (ref. 6565).



6520



- ▶ 4 super selective single-channel filters: 40 dB @ 1.25 MHz
- ▶ 4 frequency converters to convert a digital channel to another UHF frequency
- ▶ auto install functionality: device automatically finds all digital channels, and lets the user choose the channels of interest
- ▶ interconnection of several 6520's or use in combination with a Super Profiler or Profiler Plus
- ▶ medium gain: 40 dB

6520			
Inputs	-	UHF	Bypass input
Frequency range	MHz	470-862	5-862
Number of IF clusters	-	4	-
Filter bandwidth	MHz	8 (single-channel)	-
Gain	dB	40	-6
Gain adjustment	dB	30	-
Max. input level	dB _p V	109	-
Max. output level*	dB _p V	113	-
Selectivity	dB/ ± 1 MHz	30	-
Return loss	dB	10	10
Remote power	-	5 VDC / 12 VDC (100 mA)	DC power pass from OUT (1 A)
Outputs	-	1 x TV output/1x control port	
Power consumption	W	10	
Operating temperature	°C	-5 to +50	
Dimensions	mm	238 x 152 x 55	

*Terr.: -60 dBc/IM3

- ▶ 2 UHF inputs
- ▶ 6 UHF clusters from 1 to 7 channels bandwidth
- ▶ selectable remote power on all inputs

6503 6503UK				
Inputs	-	UHF1	UHF2	
Frequency range	MHz	470-862		
Filter bandwidth	-	1-7 Ch. (8-56 MHz)		
Cluster configuration	-	6	0	
	-	5	1	
	-	3	3	
Gain	dB	5		
Gain adjustment	dB	30		
Noise figure	dB	6		
Max. input level*	dB _p V	95		
Max. output level	dB _p V	75		
Selectivity	dB/ Ch±2	20		
Return loss	dB	>10		
Selectable DC power pass	-	yes		
Outputs	-	1 x TV output		
Power supply	-	External power adapter: 230-240 V~ / 5 VDC / Ø2,1 mm DC jack		
Consumption	mA	300		
Operating temperature	°C	-5 to +50		
Dimensions	mm	157 x 142 x 51		

- ▶ 3 UHF inputs
- ▶ 10 UHF clusters from 1 to 7 channels bandwidth
- ▶ selectable remote power on all inputs

6504 6504UK				
Inputs	-	UHF1	UHF2	UHF3
Frequency range	MHz	470-862		
Filter bandwidth	-	1-7 Ch. (8-56 MHz)		
Cluster configuration	-	2	8	0
	-	2	7	1
	-	2	5	3
Gain	dB	5		
Gain adjustment	dB	30		
Noise figure	dB	6		
Max. input level	dB _p V	95		
Max. output level*	dB _p V	75		
Selectivity	dB/ Ch±2	20		
Return loss	dB	>10		
Selectable DC power pass	-	yes		
Outputs	-	1 x TV output		
Power supply	-	External power adapter: 230-240 V~ / 5 VDC / Ø2,1 mm DC jack		
Consumption	mA	500		
Operating temperature	°C	-5 to +50		
Dimensions	mm	222 x 142 x 51		

6503



6504



Profilers

Programmable Filter - Equalizer



- ▶ 3 inputs: 1xVHF/2xUHF
- ▶ 9 UHF clusters from 1 to 2 channels bandwidth
- ▶ 1 single-channel VHF cluster
- ▶ 2 outputs: 1xVHF/1xVHF-UHF
- ▶ selectable remote power on all inputs

6505 | 6505UK

Inputs	-	VHF	UHF1	UHF2
Frequency range	MHz	174-230	470-862	
Filter bandwidth	-	1 Ch. (8 MHz)	1 or 2 Ch. (8 or 16 MHz)	
Cluster configuration	-	1	9	0
	-	1	6	3
	-	1	5	4
Gain	dB	5		
Gain adjustment	dB	30		
Noise figure	dB	10	6	
Max. input level	dB μ V	85	95	
Max. output level*	dB μ V	75		
Selectivity	dB/Ch±2	30	20	20
Return loss	dB	>10		
Selectable DC power pass	-	yes		
Outputs	-	1 x VHF output 1 x UHF output		
Power supply	-	External power adapter: 230-240 V~ / 5 VDC / Ø2,1 mm DC jack		
Consumption	mA	500		
Operating temperature	°C	-5 to +50		
Dimensions	mm	222 x 142 x 51		

*Terr.: -60 dBc/IM3

Profilers

Programmable Filter - Equalizer

J johansson

NEW



6506 | 6506UK



- ▶ 2 UHF inputs (LTE protected)
- ▶ 8 UHF clusters from 1 to 7 channels bandwidth
- ▶ selectable remote power on all inputs

6506 | 6506UK

Inputs	-	UHF1	UHF2
Frequency range	MHz	470-790	
Filter bandwidth	-	1-7 Ch. (8-56 MHz)	
Cluster configuration	-	8	0
		7	1
		5	3
Gain	dB	5	
Gain adjustment	dB	30	
Noise figure	dB	6	
Max. input level	dB μ V	95	
Max. output level*	dB μ V	75	
Selectivity	dB/Ch \pm 2	20	
Return loss	dB	>10	
Selectable DC power pass	-	yes	
Outputs	-	1 x TV output	
Power supply	-	External power adapter: 230-240 V~ / 5 VDC / Ø2,1 mm DC jack	
Consumption	mA	400	
Operating temperature	°C	-5 to +50	
Dimensions	mm	222 x 142 x 51	

profilers

Profiler Accessories | Control Unit

The 6565 control unit is designed to control the Johansson products through the coax cable. Many products, like profilers, active combiners,... can be configured with this device. Thanks to a clear OLED display and easy rotary button, configuration is made very easy. A great advantage is that you can control the Profiler from wherever you are in the building. Just connect the control unit to the nearest outlet and you will be able to configure the Profiler, without even standing next to it!



remote

6565



ROTARY BUTTON
FOR EASY CONTROL

Compatible products

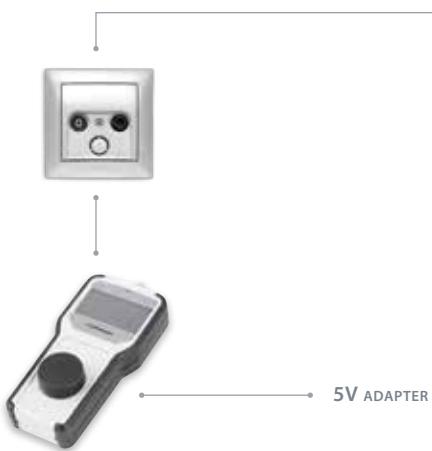
- ▶ 6620(UK)/6621(UK)/6622(UK)/6623(UK)
- ▶ 6630(UK)/6631(UK)
- ▶ 6510A
- ▶ 6520
- ▶ 6550A/6555A/6556A/6557A

6565 | 6565UK

Connectors	-	1 x F female (control port) 1 x 2,1 mm power jack
Memory capacity	-	10 presets
Operating voltage	V	5-24
Power supply	-	Delivered with 5V power adapter (can be powered through COAX)
Consumption	mA	160 (@5VDC) 70 (@24VDC)
Operating temperature	°C	-5 to +50
Dimensions	mm	176 x 83 x 43



CONTROL ON DISTANCE THROUGH THE OUTLET



6604



- ▶ Compatible with:
 - ▶ 6600/6601/6602/6603/6605/6606/6607
 - ▶ 6610/6611
- ▶ 16 memory positions

6604

Memory capacity	16 memory slots
Memory type	EEPROM
Connectors	DSUB9 Male/Female
LED	3 color status indication LED
Dimensions	78 x 41 x 25 mm

Profilers

Additional products

EQUALIZER

6510A	Programmable Digital Single-Channel Equalizer	1 UHF input / 1 bypass input / 1 output / 6 single-channel highly selective filters / programmable by PC or Control Unit
-------	---	--

ACTIVE COMBINER

6550A	Active Combiner 2 inputs	1 UHF input / 1 UHF bypass input / 1 UHF cluster + bypass
6555A	Active Combiner 2 inputs	2 UHF inputs / 2 UHF clusters
6556A	Active Combiner 3 inputs	3 UHF inputs / 4 UHF clusters
6557A	Active Combiner 4 inputs	4 UHF inputs / 6 UHF clusters

ACCESSORIES

6554	PC to Coax Module for active combiners
6564	Ethernet to coax adapter for the following references: 6620/6621/6622/6623/6630/6631, 6510A, 6520 and 6550A/6555A/6556A/6557A

Amplifiers

- An essential part in the distribution of TV signals over coaxial cables is the amplifier. In domestic applications, this will typically be a masthead preamplifier while large collective installations require high-power distribution amplifiers. With the upcoming LTE (4G) signals in several countries, big disturbances will arise in the TV systems that are not LTE-protected. This is why we present a whole new range of amplifiers that makes your installations future proof, and offer you the best TV images possible!



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Amplifiers

Terrestrial Distribution Amplifiers

The new distribution amplifiers from Johansson set the new standard! The amplifiers are fully LTE-ready and have a high gain, ensuring a perfect signal quality throughout the building. Thanks to the new technologies used, the amplifiers are far more efficient than their predecessors.



- ▶ 3/4 inputs
- ▶ VHF-UHF input with return path (ref. 7774, 7775), ideal for CATV applications
- ▶ split-band amplifiers with interstage attenuators and dynamic range of 30 dB
- ▶ high gain (up to 40 dB), high output power (>122 dB_pV)
- ▶ slope adjustment on VHF-UHF (ref. 7774, 7775)
- ▶ high input power: up to 110 dB_pV (saturation of input virtually impossible)
- ▶ 5/12 VDC switchable remote voltage to power a preamplifier
- ▶ thanks to the new technology used, the efficiency of the amplifiers is 400% better compared to older amplifiers!
- ▶ green solution: 5,5W for high power model / <3W for mid and low-power models
- ▶ zamak diecast housing
- ▶ detachable power supply included
- ▶ -30 dB test output
- ▶ UK versions are delivered with UK power plug



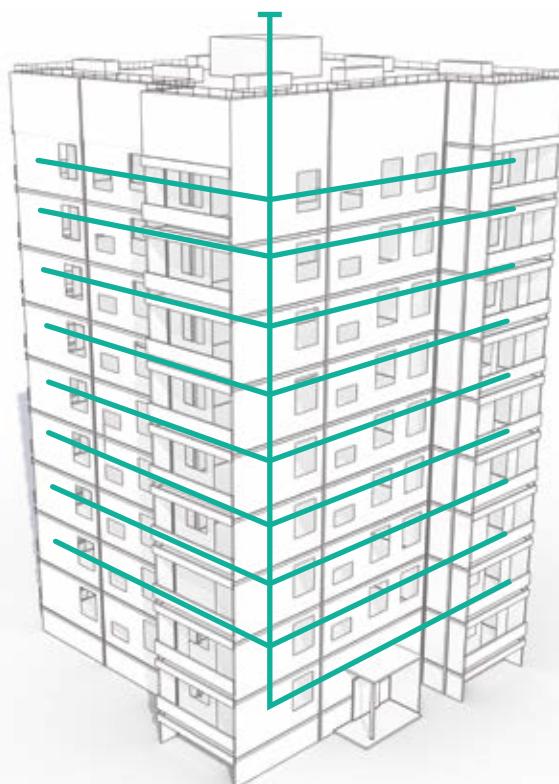
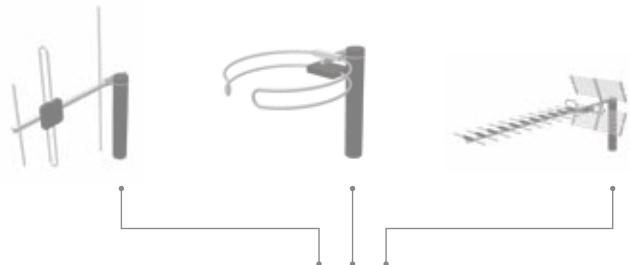
[7773\(UK\)](#) | [7774 \(UK\)](#) | [7775\(UK\)](#)

		7773(UK)		7774(UK)		7775(UK)
Inputs	-	FM BIII/DAB UHF		FM BIII/DAB UHF VHF-UHF		FM BIII/DAB UHF VHF-UHF
Frequency range	MHz	FM: 88-108 BIII/DAB: 174-240 UHF: 470-790		FM: 88-108 BIII/DAB: 174-240 UHF: 470-790 VHF-UHF: 5-1000 (RP: 5-65)		FM: 88-108 BIII/DAB: 174-240 UHF: 470-790 VHF-UHF: 5-1000 (RP: 5-65)
Gain	dB	FM: 8 to 30 BIII/DAB: 8 to 30 UHF: 20 to 40		FM: -12 to 20 BIII/DAB: -12 to 20 UHF: -4 to 26 VHF-UHF: -4 to 26		FM: 0 to 32 BIII/DAB: 0 to 32 UHF: 5 to 40 VHF-UHF: 5 to 40
Return path loss	dB	-		-2		-2
Slope adjustment	dB	-		VHF-UHF: 0 to 15		VHF-UHF: 0 to 15
Max. input power	dB _p V	90		110		110
Max. output power	dB _p V	110		116		>122
Noise figure	dB	FM: 9 BIII/DAB: 9 UHF: 6		FM: 8 BIII/DAB: 7 UHF: 5 VHF-UHF: 6,5		FM: 8 BIII/DAB: 7 UHF: 5 VHF-UHF: 6,5
Return loss	dB	>10		>10		>10
Remote power	-	UHF: 5 VDC (200 mA) /12 VDC (100 mA)		BIII/DAB: 5 VDC (200 mA) /12 VDC (100 mA) UHF: 5 VDC (200 mA)/12 VDC (100 mA)		BIII/DAB: 5 VDC (200 mA) /12 VDC (100 mA) UHF: 5 VDC (200 mA)/12 VDC (100 mA)
Supply voltage	VAC	200-264		200-264		200-264
Power consumption	W	1,5		3		5,5
Dimensions	mm			238 x 152 x 55		

Amplifiers

Terrestrial Distribution Amplifiers

J johansson



Amplifiers

Amplifiers

Wideband Indoor Amplifier

NEW



7720 | 7720L

- ▶ 1 wideband input: 47-862 MHz (VHF-UHF)
- ▶ 2 outputs
- ▶ adjustable gain: 13-28 dB
- ▶ power LED indicator
- ▶ wall mounting with 2 supplied screws



7720 | 7720L

Frequency range	MHz	47-862	47-790
Adjustable gain	dB	13-28	
Noise figure	dB	4,0	
Max. output level	dB μ V	101	
Return loss (input/output)	dB	10	
Isolation between outputs	dB	15	
Power	-	230V~/10VA	
Dimensions	mm	110 x 94 x 41	

VHF-UHF Indoor Amplifier

NEW



7722 | 7722L

- ▶ 1 input: 40-300 MHz + 470-862 MHz
- ▶ 2 outputs
- ▶ adjustable VHF gain: 8-28 dB
- ▶ adjustable UHF gain: 15-30 dB
- ▶ power LED indicator



7722

|

7722L

Frequency range	MHz	40-320 + 470-862	40-320 + 470-790
Adjustable gain	dB	VHF: 8-28/UHF: 15-30	
Noise figure	dB	4,0	
Max. output level	dB μ V	107	
Return loss (input/output)	dB	10	
Isolation between outputs	dB	15	
Remote power	-	no	
Power	-	230V~/6,5VA	
Dimensions	mm	102 x 76 x 54	

Amplifiers

UHF Preamplifier KIT

J johansson

NEW



KIT 7327 | 2434



- ▶ 1 input/1 output
- ▶ LTE (4G) rejection
- ▶ ultra low-noise
- ▶ 19 dB gain
- ▶ low power consumption: only 20 mA
- ▶ power indication LED
- ▶ 5-24 VDC operating voltage

- ▶ 24 V high-efficiency power supply
- ▶ short-circuit protection
- ▶ 2 outputs
- ▶ power LED
- ▶ wall or DIN-rail mountable

7327

Frequency range	MHz	470-790 (Ch. 21-60)
Gain	dB	19
Noise figure	dB	2,0
Input level	dB _p V	78
Output level	dB _p V	97
Power supply	VDC	5-24
Consumption	mA	20
Dimensions	mm	120 x 115 x 50

2434

Outputs	-	2
Insertion loss	dB	4
Isolation between outputs	dB	10
AC input voltage/Frequency/Power	-	230 V~ / 50 Hz / 4,8 W
DC output voltage	VDC	24
Output current	mA	150
Dimensions	mm	110 x 94 x 41

Amplifiers

UHF Preamplifier KIT



KIT 7328 | 2434

- ▶ 1 input/1 output
- ▶ LTE (4G)
- ▶ low-noise
- ▶ 15-35 dB adjustable gain
- ▶ power indication LED
- ▶ 24 VDC operating voltage

- ▶ 24 V high-efficiency power supply
- ▶ short-circuit protection
- ▶ 2 outputs
- ▶ power LED
- ▶ wall or DIN-rail mountable



7328

Frequency range	MHz	470-790 (Ch. 21-60)
Gain	dB	15-35
Noise figure	dB	3,5
Max. input level	dBμV	82
Max. output level	dBμV	104
Power supply	VDC	24
Consumption	mA	35
Dimensions	mm	120 x 115 x 50

2434

Outputs	-	2
Insertion loss	dB	4
Isolation between outputs	dB	10
AC input voltage/Frequency/Power	-	230 V~ / 50 Hz / 4,8 W
DC output voltage	VDC	24
Output current	mA	150
Dimensions	mm	110 x 94 x 41

Amplifiers

VHF/UHF Preamplifier KIT

J johansson



KIT 7460 | 2434

- ▶ 1 x VHF input/1 x UHF input
 - ▶ 1 wideband output
 - ▶ up to 105 dB μ V output power
 - ▶ 0-20 dB adjustable gain on VHF
 - ▶ 15-35 dB adjustable gain on UHF
 - ▶ LTE (4G) + GSM rejection
 - ▶ low-noise
 - ▶ power indication LED
 - ▶ 24 VDC operating voltage
-
- ▶ 24 V high-efficiency power supply
 - ▶ short-circuit protection
 - ▶ 2 outputs
 - ▶ power LED
 - ▶ wall or DIN-rail mountable



7460

Inputs	-	VHF (BIII/DAB)	UHF (Ch. 21-60)
Frequency range	MHz	170-240	470-790
Gain	dB	5-20	20-35
Noise figure	dB	4,2	2,5
Max. input level	dB μ V	107	85
Max. output level	dB μ V	107	103
Power supply	VDC	24	
Consumption	mA	35	
Dimensions	mm	120 x 115 x 50	

2434

Outputs	-	2
Insertion loss	dB	4
Isolation between outputs	dB	10
AC input voltage/Frequency/Power	-	230 V~ / 50 Hz / 4,8 W
DC output voltage	VDC	24
Output current	mA	150
Dimensions	mm	110 x 94 x 41

Amplifiers

VHF/UHF Preamplifier KIT



KIT 7462 | 2434

- ▶ 1 universal input: VHF only, UHF only or VHF+UHF (switchable with jumpers)
- ▶ 2 wideband outputs
- ▶ up to 105 dB μ V output power
- ▶ 7-22 dB adjustable gain on VHF
- ▶ 7-22 dB adjustable gain on UHF
- ▶ LTE (4G) + GSM rejection
- ▶ low-noise
- ▶ power indication LED
- ▶ DC power pass (with jumper)
- ▶ 5-24 VDC operating temperature

- ▶ 24 V high-efficiency power supply
- ▶ short-circuit protection
- ▶ 2 outputs
- ▶ power LED
- ▶ wall or DIN-rail mountable



7462	
Inputs	-
Frequency range	174-240/470-790/174-240+470-790 MHz
Gain	dB VHF: 7-22 UHF: 7-22
Noise figure	dB VHF: 3,5 UHF: 3,5
Max. input level	dB μ V 80
Max. output level	dB μ V 105
Power supply	VDC 5-24
Consumption	mA 35 mA @ 24VDC / 90 mA @ 5 VDC
Dimensions	mm 112 x 98 x 56

2434	
Outputs	-
Insertion loss	dB 2
Isolation between outputs	dB 4
AC input voltage/Frequency/Power	- 230 V~ / 50 Hz / 4,8 W
DC output voltage	VDC 24
Output current	mA 150
Dimensions	mm 110 x 94 x 41

Amplifiers

VHF/UHF Preamplifier KIT

J johansson



KIT 7463 | 2434

- ▶ 2 universal input: VHF only, UHF only or VHF+UHF (switchable with jumpers)
- ▶ 2 wideband outputs
- ▶ up to 105 dB_pV output power
- ▶ 7-22 dB adjustable gain on VHF
- ▶ 7-22 dB adjustable gain on UHF
- ▶ LTE (4G) + GSM rejection
- ▶ low-noise
- ▶ power indication LED
- ▶ DC power pass (with jumper)
- ▶ 5-24 VDC operating temperature

- ▶ 24 V high-efficiency power supply
- ▶ short-circuit protection
- ▶ 2 outputs
- ▶ power LED
- ▶ wall or DIN-rail mountable



7463

Inputs	-	VHF only / UHF only / VHF-UHF (switchable with jumpers)	VHF only / UHF only / VHF-UHF (switchable with jumpers)
Outputs	-	2 x wideband output	
Frequency range	MHz	174-240/470-790/174-240+470-790	174-240/470-790/174-240+470-790
Gain	dB	VHF: 7-22 UHF: 7-22	VHF: 7-22 UHF: 7-22
Noise figure	dB		VHF: 3,5 UHF: 3,5
Max. input level	dB _p V	80	
Max. output level	dB _p V	105	
Power supply	VDC	5-24	
Consumption	mA	50 mA @ 24 V / 120 mA @ 5 V	
Dimensions	mm	112 x 98 x 56	

2434

Outputs	-	2
Insertion loss	dB	4
Isolation between outputs	dB	10
AC input voltage/Frequency/Power	-	230 V~ / 50 Hz / 4,8 W
DC output voltage	VDC	24
Output current	mA	150
Dimensions	mm	110 x 94 x 41

Amplifiers

UHF Preamplifier



7327

- ▶ 1 input/1 output
- ▶ LTE (4G) rejection
- ▶ ultra low-noise
- ▶ 19 dB gain
- ▶ low power consumption: only 20 mA
- ▶ power indication LED
- ▶ 5-24 VDC operating voltage



7327

Frequency range	MHz	470-790 (Ch. 21-60)
Gain	dB	19
Noise figure	dB	2,0
Input level	dB _p V	78
Output level	dB _p V	97
Power supply	VDC	5-24
Consumption	mA	20
Dimensions	mm	120 x 115 x 50

UHF Preamplifier



7328

- ▶ 1 input/1 output
- ▶ LTE (4G)
- ▶ low-noise
- ▶ 15-35 dB adjustable gain
- ▶ power indication LED
- ▶ 24 VDC operating voltage



7328

Frequency range	MHz	470-790 (Ch. 21-60)
Gain	dB	15-35
Noise figure	dB	3,5
Max. input level	dB _p V	82
Max. output level	dB _p V	104
Power supply	VDC	24
Consumption	mA	35
Dimensions	mm	120 x 115 x 50

Amplifiers

VHF/UHF Preamplifier

J johansson

NEW

**4G
lte**

7415L



- ▶ FM input/B.III or DAB input/UHF input
- ▶ 1 wideband output
- ▶ 12 dB gain on FM
- ▶ 15-30 dB adjustable gain on B.III/DAB
- ▶ 20-35 dB adjustable gain on UHF
- ▶ LTE (4G)
- ▶ low-noise
- ▶ 24 VDC operating voltage
- ▶ wall or mast mountable

7415L

Inputs	-	BII (FM)	BIII/DAB	UHF C21-60
Frequency range	MHz	88-108	170-230	470-790
Gain	dB	12	15-30	33-20
Noise Figure	dB	4	2,0	3,2
Max. input level	dB _p V	99	91	84
Max. Output level	dB _p V	111	107	108
Power supply	VDC		24	
Consumption	mA		60	
Dimensions	mm		112 x 98 56 mm	

**4G
lte**

7460



- ▶ 1 x VHF input/1 x UHF input
- ▶ 1 wideband output
- ▶ up to 105 dB_pV output power
- ▶ 5-20 dB adjustable gain on VHF
- ▶ 20-35 dB adjustable gain on UHF
- ▶ LTE (4G)
- ▶ low-noise
- ▶ power indication LED
- ▶ 24 VDC operating voltage

7460

Inputs	-	VHF (BIII/DAB)	UHF (Ch. 21-60)
Frequency range	MHz	170-240	470-790
Gain	dB	5-20	20-35
Noise Figure	dB	4,5	2,5
Max. input level	dB _p V	107	85
Max. Output level	dB _p V	107	103
Power supply	VDC		24
Consumption	mA		35
Dimensions	mm		120 x 115 x 50

Amplifiers

VHF/VHF-UHF universal preamplifier (1 input/2 outputs)

7462

- ▶ 1 universal input: VHF only, UHF only or VHF+UHF (switchable with jumpers)
- ▶ 2 wideband outputs
- ▶ up to 105 dB_pV output power
- ▶ 7.22 dB adjustable gain on VHF
- ▶ 7.22 dB adjustable gain on UHF
- ▶ LTE (4G) + GSM rejection
- ▶ low-noise
- ▶ power indication LED
- ▶ DC power pass (with jumper)
- ▶ 5-24 VDC operating voltage



7462	
Inputs	-
Frequency range	MHz
Gain	dB
Noise figure	dB
Max. input level	dB _p V
Max. output level	dB _p V
Power supply	VDC
Consumption	mA
Dimensions	mm

Amplifiers

J johansson

VHF/VHF-UHF universal preamplifier (2 inputs/2 outputs)



7463

- ▶ 2 universal inputs: VHF only, UHF only or VHF+UHF (switchable with jumpers)
- ▶ 2 wideband outputs
- ▶ up to 105 dB μ V output power
- ▶ 7-22 dB adjustable gain on VHF
- ▶ 7-22 dB adjustable gain on UHF
- ▶ LTE (4G) + GSM rejection
- ▶ low-noise
- ▶ power indication LED
- ▶ DC power pass (with jumper)
- ▶ 5-24 VDC operating voltage



7463

Inputs	-	VHF only / UHF only / VHF-UHF (switchable with jumpers)	VHF only / UHF only / VHF-UHF (switchable with jumpers)
Outputs	-	2 x wideband output	
Frequency range	MHz	174-240/470-790/174-240+470-790	174-240/470-790/174-240+470-790
Gain	dB	VHF: 7-22 UHF: 7-22	VHF: 7-22 UHF: 7-22
Noise figure	dB	VHF: 3,5 UHF: 3,5	
Max. input level	dB μ V	80	
Max. output level	dB μ V	105	
Power supply	VDC	5-24	
Consumption	mA	50 mA @ 24 V / 120 mA @ 5 V	
Dimensions	mm	112 x 98 x 56	

5V Power Supply

2425

- ▶ 5 V high-efficiency power supply
- ▶ output current: 25 mA
- ▶ 1 output
- ▶ power LED
- ▶ wall or DIN-rail mountable
- ▶ short-circuit protected



2425

Outputs	-	1
Insertion loss	dB	1
AC input voltage/Frequency/Power	-	230 V~ / 50 Hz / 1,3 W
DC output voltage	VDC	5
Output current	mA	25
Dimensions	mm	110 x 78 x 41

USB Power Supply

Use the USB port of your TV, Set-top box, DVD player,... to power a preamplifier.
This is a very power-efficient solution, which guarantees the preamplifier is switched-on, only when you need it!
And of course, you don't need another power plug...



2426

- ▶ green solution: your preamplifier will be automatic powered down after switching off your TV
- ▶ 1 output
- ▶ output current: up to 300 mA
- ▶ power indication LED
- ▶ wall or DIN-rail mountable
- ▶ short-circuit protected



2426

Outputs	-	1
Insertion loss	dB	1
DC input voltage (USB)	VDC	5
DC output voltage	VDC	5
Output current	mA	300
Dimensions	mm	110 x 78 x 41

24V Power Supply

- ▶ high-efficiency
- ▶ 2 outputs
- ▶ 24V stabilized
- ▶ short-circuit protection
- ▶ power LED indicator
- ▶ wall or DIN-rail mountable



2434

2434

Outputs	-	2
Insertion loss	dB	4
Isolation between outputs	dB	10
AC input voltage/Frequency/Power	-	230 V~ / 50 Hz / 4,8 W
DC output voltage	VDC	24
Output current	mA	150
Dimensions	mm	110 x 94 x 41

Amplifiers

Additional products



TERRESTRIAL DISTRIBUTION AMPLIFIER

7760A	Multiband Amplifier	3 inputs - 1 output
7761A	Multiband Amplifier	3 inputs - 6 output
7762A	Multiband Amplifier	4 inputs - 1 output
7763A	Multiband Amplifier	4 inputs - 6 output

INDOOR AMPLIFIER

7708	VHF-UHF Indoor Amplifier	2 outputs - separate VHF and UHF adjustment
7710	Indoor Amplifier	4 outputs - separate VHF and UHF adjustment
7718	VHF-UHF Indoor Amplifier	2 outputs - separate VHF and UHF adjustment

PREAMPLIFIER / POWER SUPPLY KIT

KIT 7316/2430A	One Band Preamplifier and Power Supply	UHF: 25-40 dB
KIT 7325/2425	Preamplifier and Power KIT for DTT	Strong rejection of CH61-69
KIT 7404/2430A	2 inputs Preamplifier and Power Supply	VHF: 10-30 dB / UHF: 25-40 dB
KIT 7415/2430A	3 inputs Preamplifier-combiner and Power Supply	FM: 12 dB / BIII: 10-28 dB / UHF: 20-35 dB
KIT 7422/2430A	3 inputs Preamplifier and Power Supply	VHF: 10-30 dB / UHF: 25-40 dB / UHF: 25-40 dB
KIT 7422E/2430AE	3 inputs Preamplifier and Power Supply	VHF: 10-30 dB / UHF: 25-40 dB / UHF: 25-40 dB
KIT 7490/2430A	2 inputs Preamplifier-combiner and Power Supply	VHF: 10-30 dB / UHF: 25-40 dB

PREAMPLIFIER

7211	Multiband Preamplifier	UHF + UHF/VHF: 10-30 dB / UHF 25-40 dB
7310	One Band Preamplifier	UHF ch. 21-69, 18 dB
7316	One Band Preamplifier	UHF ch. 21-69, 25-40 dB adjustable
7320	DTT Preamplifier	UHF DTT 25-35 dB
7320A	4G/LTE preamplifier	UHF ch. 21-60, 25-35 dB
7322	DTT LTE Preamplifier	UHF DTT LTE 10-25 dB
7325A	4G/LTE Preamplifier	UHF ch. 21-60, 15 dB
7403A	2 inputs Preamplifier	BIII: 8-28 dB / UHF: 20-35 dB
7410	3 inputs Preamplifier-combiner	BIII: 10-30 dB / UHF: 25-40 dB / UHF: 20-35 dB
7415	3 inputs Preamplifier-combiner	Bd. II (FM): 12 dB / Bd III: 10-28 dB / UHF : 20-35 dB
7441	3 inputs Preamplifier-combiner	Bd. II (FM): 10 dB / Bd III: -5 - +10 dB / UHF : 10-25 dB

For more information please send an e-mail to sales@unitrongroup.com or visit our website www.unitrongroup.com.

Distribution Accessories

- ▶ Johansson offers a wide range of high-quality accessories for the distribution of terrestrial, cable and satellite TV. All products are designed with the future LTE-networks in mind and make sure your TV distribution system is future-proof!



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Distribution Accessories

Filters | LTE + GSM Filter

Long Term Evolution (LTE) is a consequence of the digitization of the TV-signals. Digital signals offer a great bandwidth-advantage, which will be used for next-generation telecommunication applications (4G). This implies the UHF channels 61-69 will no longer be used for TV-purposes, and have to be filtered-out carefully to avoid interference! Our LTE-ready products offer strong filtering capabilities for the UHF channels 61-69 and the GSM-band.

Filters | LTE (4G) + GSM Filter

NEW

- ▶ >15 dB LTE rejection
- ▶ wall or mast mountable with strap
- ▶ indoor and outdoor mountable

6022GSM



Example of outdoor product

6022GSM

Frequency range	MHz	5-790
Cut off channel	-	60
Insertion loss	dB	1
GSM rejection 880-960 MHz	dB	60
LTE (4G) rejection	dB	20
DC power pass	mA	500
Connectors	-	2 x F female
Mounting	-	Indoor/outdoor (indoor flange provided)
Dimensions	mm	112 x 98 x 56

Filters | LTE (4G) Filter

NEW

- ▶ 25 dB LTE rejection
- ▶ in-line small housing
- ▶ indoor use

6023C57 | 6023C58 | 6023C59



6023C57 | 6023C58 | 6023C59

	6023C57	6023C58	6023C59	
Frequency range	MHz	5-766	5-774	5-782
Cut off channel	-	57	58	59
Insertion loss	dB	1	1	1
LTE (4G) rejection	dB	35	30	25
GSM rejection	dB	25	25	25
DC power pass	mA	500	500	500
Connectors	-	2 x F female	2 x F female	2 x F female
Mounting	-	Indoor Use	Indoor Use	Indoor Use
Dimensions	mm	112 x 98 x 56	112 x 98 x 56	112 x 98 x 56

Distribution Accessories

Filters | LTE (4G) Filter



NEW

- ▶ 20 dB LTE rejection
- ▶ indoor use (direct plug-in mounting behind TV)
- ▶ IEC connectors

6030C58		
Frequency range	MHz	5-782
Cut off	-	58
Insertion Loss	dB	1
LTE (4G) rejection	dB	20
GSM rejection	dB	25
DC power pass	mA	500
Connectors	-	IEC male/female
Mounting	-	Indoor Use
Dimensions	mm	67 x 33 x 22



6030C58



Filters | LTE (4G) Filter

NEW

- ▶ high LTE (4G) rejection
- ▶ indoor and outdoor mountable

6024C58 | 6024C59 | 6025C60

6024C58		6024C59
Frequency range	MHz	5-774
Cut off channel	-	58
Insertion loss	dB	2,5
LTE (4G) rejection	dB	45
GSM rejection	dB	15
DC power pass	mA	500
Connectors	-	2 x F female
Mounting	-	Indoor/outdoor (indoor flange provided)
Dimensions	mm	112 x 98 x 56

6025C60

5-790
60
1,5
30
No
500
2 x F female
Indoor/outdoor (indoor flange provided)
112 x 98 x 56



Example of
indoor product

Filters | LTE (4G) Tetra Filter

NEW

- ▶ UHF/Tetra filter
- ▶ indoor and outdoor mountable

6040C58 | 6040C59

6040C58		6040C59
Bandwidth	MHz	470-774
Channels	-	C21-58
Insertion loss	dB	1,5
Rejection	dB	35
GSM rejection	dB	30
DC power pass	mA	500
Connectors	-	2 x F female
Mounting	-	Indoor/outdoor (indoor flange provided)
Dimensions	mm	112 x 98 x 56



Example of
outdoor product

Distribution Accessories

Splitters | Wideband Indoor Splitters 5-2300 MHz



- ▶ 2, 3, 4, 6, 8-way wideband splitters
- ▶ low insertion loss
- ▶ nickel plated zinc diecast housing
- ▶ "F"-type connectors
- ▶ DC power pass on all ports (diode protection)

	4502	4503	4504	4506	4508
Way	-	2	3	4	6
Frequency	MHz	5-2300	5-2300	5-2300	5-2300
Insertion loss	dB	6,5	11	11	16
Isolation	dB	16	20	20	20
Return loss in/out	dB	10	10	10	10
DC power pass (out/in)	-	2	3	4	6
Dimensions (mm)	mm	47x56x21	47x77x21	47x77x21	57x120x25

Distribution Accessories

Combiners | TV Combiners



1269

1464

- ▶ low-loss
- ▶ indoor/outdoor use



1269

1281

1200A

Inputs (DC power pass=*)	MHz	VHF: 40-230 * UHF: 470-862 *	UHF1: 470-862 * UHF2: 470-862 *	FM: 88-108 VHF-UHF: 40-68 + 175-862 (rej. FM) *	
Insertion loss	dB	VHF: 0,5 UHF: 1,0	UHF1: 4,5 UHF2: 4,5	FM: 1,0 VHF-UHF: 1,0 (FM rejection >20)	
Dimensions	mm	112 x 98 x 56			

1352

1353

Inputs (DC power pass=*)	MHz	VHF: 40-230 * UHF1: 470-862 * UHF2: 470-862 *	BI-FM: 40-108 * BIII: 170-230 * UHF: 470-862	
Insertion loss	MHz	VHF: 0,5 UHF1: 4,5 UHF2: 4,5	BI-FM: 1,0 BIII: 1,0 UHF: 2,0	
Dimensions	mm	112 x 98 x 56		

1464

Inputs (DC power pass=*)	MHz	BI-FM: 40-108 * BIII: 170-230 * UHF1: 470-862 * UHF2: 470-862 *	
Insertion loss	dB	BI-FM: 0,5 BIII: 0,5 UHF1: 3,5 UHF2: 3,5	
Dimensions	mm	112 x 98 x 56	

Distribution Accessories

DiSEqC Switches

9208



9210



	9208		9210
Number of inputs	-	2	4
Frequency range	MHz	950-2150	
Insertion loss	dB	2	4
Isolation	dB	15	30
Switching control	-	Tone Burst and DiSEqC 1.0	DiSEqC 1.0
Consumption	mA	25 max.	
Dimensions	mm	112 x 98 x 56	

Twin DiSEqC Switch 5/2

9920

- switch for 2 TWIN LNB's combined with terrestrial



9920

Frequency range	MHz	Sat.: 950-2150 - Terr.: 5-862
Insertion loss	dB	Sat.: 4 max. - Terr.: 8 max.
Switching control	dB	Tone Burst and DiSEqC 1.0/1.1
Isolation each SAT in/out	dB	40 min
Isolation SAT/TERR	dB	30 min
Current	mA	20 mA per receiver
DC power pass on SAT inputs	mA	350 max
Dimensions	mm	112 x 98 x 56

Distribution Accessories

Combiners | TV-SAT Combiners



9506

- indoor/outdoor combiner
- DC power pass



9501

	9501	9506
Band/Insertion loss (DC power pass=*)	MHz	VHF-UHF 5-862/1 dB
	MHz	SAT* 950-2150 /2 dB
Isolation	dB	> 15 (Terr.) > 30 (Sat.)
Note	-	indoor use
Dimensions	mm	61 x 51 x 16
		VHF-UHF 5-862/2 dB
		SAT* 950-2150 /2,5 dB
		> 15 (Terr.) > 40 (Sat.)
		outdoor use
		112 x 98 x 56

Line Amplifiers | DTT Line Amplifier



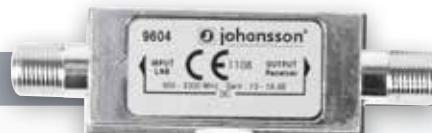
7317

- low noise UHF line amplifier
- ideal to pump up low level signals and reject impulse noise in DTT reception
- powered with 5V of DTT (DVB-T) receiver

7317

Band	dB	UHF C 21- 69
Frequency	MHz	470-862
Gain	dB	15
Noise figure	dB	2,0
Max. Output level	dB _P V	102
Consumption	mA	20
Voltage supply range	V	5 to 24
Dimensions	mm	72 x 22 x 17

Line Amplifiers | Satellite Line Amplifiers



9604

- sloped gain for compensating coaxial cable losses
- available in 3 versions with different bandwidth
 - 40-2150 MHz
 - 950-2150 MHz
 - 40-3650 MHz (for use in combination with stacker-destacker)

9604 | 9617 | 9637

Frequency range	MHz	950-2150	40-2150	40-3650
Gain	dB	13 (950 MHz) 18 (2150 MHz)	9 (40 MHz) 12 (860 MHz) 13 (950 MHz) 16 (2150 MHz)	7 (40 MHz) 10 (860-850 MHz) 13 (2150 MHz) 15 (3650 MHz)
Noise figure	dB	4	4	7
Max. Output level	dB _P V	110	110	110
Power supply	V	13-18 / 30 mA	13-18 / 30 mA	13-18 / 30 mA
DC power pass	mA	500 max.	500 max.	500 max.
Dimensions	mm	72 x 22 x 17	77 x 21 x 15	77 x 21 x 15

Distribution Accessories

Others | Attenuator

9609



- ▶ small housing
- ▶ adjustable attenuation: 0-20 dB
- ▶ DC power pass

9609

Frequency range	MHz	700-2150
Attenuation	dB	0-20 adjustable
DC power pass	-	yes
Dimensions	mm	77 x 22 x 17

Others | 22 kHz Tone Blocking Filter

9613



- ▶ small housing
- ▶ low insertion loss

9613

Frequency range	MHz	950-2150
Insertion loss	dB	1
DC loss	V	0,5 typ.
Dimensions	mm	77 x 22 x 17

Others | DC Block - DC Inserter

9602



- ▶ block DC voltage to receiver
- ▶ pass DC voltage to LNB

9602

Frequency range	MHz	40-2150
Insertion loss	dB	1
DC power pass	mA	500 max.
Dimensions	mm	61 x 51 x 16

Distribution Accessories



Others | DC Block

9631



- ▶ block DC voltage from input to output

9631

Frequency range	MHz	5-2300
Attenuation	dB	1
Dimensions	mm	72 x 22 x 17

Others | F-F Galvanic Isolator

9620



- ▶ high galvanic isolation of both center and shield
- ▶ small design

9620

Frequency range	MHz	5-2150
Galvanic isolation	VDC	400-800
Capacitor value	nF	center: 1 / shield:4
Dimensions	mm	51 x 14 x 14

Others | Priority Switch

9337



- ▶ priority switching
- ▶ signal by pass

9337

Frequency range:	MHz	950 - 2150
Insertion loss	dB	< 3,5
Isolation	dB	> 15
Signal by pass	-	22 KHz tone and 13/18V power
Switch control	-	Coaxial voltage 0V/13-18V of the priority satellite receiver Power > 10.0V = ON/<7.0 = OFF
DC loss	V	1.0 max.
Dimensions	mm	61 x 51 x 16

Distribution Accessories

Additional products

TAPS

4510	1 way tap	5-2300 MHz, 10 dB
4511	1 way tap	5-2300 MHz, 15 dB
4512	1 way tap	5-2300 MHz, 20 dB
4513	1 way tap	5-2300 MHz, 25 dB
4520	2 way tap	5-2300 MHz, 10 dB
4521	2 way tap	5-2300 MHz, 15 dB
4522	2 way tap	5-2300 MHz, 20 dB
4523	2 way tap	5-2300 MHz, 25 dB
4524	2 way tap	5-2300 MHz, 30 dB
4540	4 way tap	5-2300 MHz, 12 dB
4541	4 way tap	5-2300 MHz, 15 dB
4542	4 way tap	5-2300 MHz, 20 dB
4543	4 way tap	5-2300 MHz, 25 dB
4544	4 way tap	5-2300 MHz, 30 dB
4561	6 way tap	5-2300 MHz, 15 dB
4562	6 way tap	5-2300 MHz, 20 dB
4563	6 way tap	5-2300 MHz, 25 dB
4581	8 way tap	5-2300 MHz, 15 dB
4582	8 way tap	5-2300 MHz, 20 dB
4583	8 way tap	5-2300 MHz, 25 dB

FILTER

6020	Rejection Filter 425/433 MHz
6006F	Tatoo Filter 466 MHz

COMBINER

1282	2 inputs Combiner	Bd. HVDC : bd. VDC
9507	SAT/TV Combiner high isolation	VHF-UHF DC/ Satellite DC, high isolation Recommended for universal LNB
9509	SAT/TV Combiner high isolation	VHF+UHF / Satellite DC combiner, high isolation

DiSEqC SWITCH

9208E	DiSEqC Switch	2 inputs / 1 output
9209	DiSEqC Switch + Terrestrial	2 inputs + 1 terrestrial input / 1 output
9209E	DiSEqC Switch	2 inputs + 1 terrestrial input / 1 output
9210E	DiSEqC Switch	4 inputs / 1 output
9213	DiSEqC Switch + Terrestrial	3 inputs + 1 terrestrial input / 1 output
9214	DiSEqC Switch + Terrestrial	4 inputs + 1 terrestrial input / 1 output
9215	DiSEqC Switch + Terrestrial	3 inputs / 1 output
9215E	DiSEqC Switch	3 inputs / 1 output
9216	DiSEqC 1.1 Switch option A/B 2 inp 1 outp	2 inputs / 1 output
9218	DiSEqC Option Switch	2 inputs
9219	Singel User DiSEqC Option Switch	2 inputs / 1 output
9222	DiSEqC 2.0 Switch	2 inputs
9223	DiSEqC 2.0 Switch	3 inputs
9224	DiSEqC 2.0 Switch	4 inputs

OTHERS

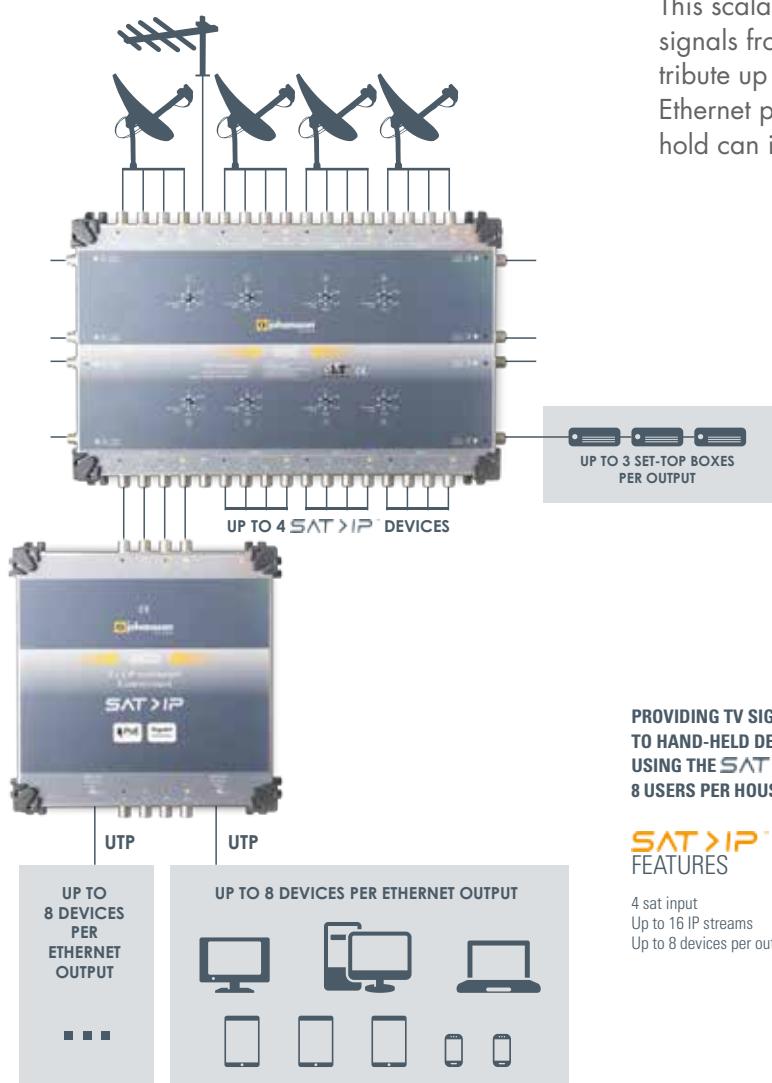
6050E	VHF-UHF Attenuator, adjustable
9412	22 kHz / 12 V Generator
9614	Lightning Protection Filter
9614E	Lightning Protection Filter
9615	Voltage Regulator

Multiswitches & SCR

- Multiswitches are a key element in the distribution of satellite signals over coaxial cable throughout big buildings. In many cases there is only one coax cable available from the technical riser to the apartment.

UnitronGroup offers a wide range of multiswitches with integrated 'SCR' technology. With those multiswitches, you can connect multiple set-top boxes for multi-room applications to numerous satellites using one coax cable only!

By enabling Single Cable Router mode in Unitron's "Johansson SCR multiswitch" we simplify the deployment and lower the overall cost of satellite service installation.



SAT>IP™ is a revolutionary technology for the cost-effective distribution of satellite signals via in-home or private IP networks. This **SAT>IP**™ enabled multiswitch is the perfect solution to provide TV signals over Ethernet or WiFi. All channels available over satellite can be followed on hand-held devices, smartphones and tablets, using the **SAT>IP**™ app for Android and iOS.

The **SAT>IP**™ multiswitch is equipped with Power over Ethernet (PoE), making an external power supply or adapter superfluous. In case the routers or switches in the building are not yet PoE-enabled, an optional PoE power supply can be delivered to power the unit.

This scalable multiswitch system can receive signals from 4 satellite bands and can distribute up to 16 IP streams through 2 Gigabit Ethernet ports. This means 8 users per household can independently watch TV!

**WATCH SATELLITE TV
FROM MULTIPLE SATELLITES
IN EVERY ROOM WITH ONE COAX CABLE**

SCR MULTISWITCH FEATURES

INPUT
1 x Terrestrial input
from 4, 8 or 16 satellite inputs
from 1, 2 or 4 satellite positions

OUTPUT
4 or 8 outputs (up to 12 or 24 tuners)
Up to 4 or 8 legacy receivers
Up to 12 or 24 SCR receivers

**PROVIDING TV SIGNALS OVER ETHERNET OR WIFI
TO HAND-HELD DEVICES, SMARTPHONES AND TABLETS,
USING THE **SAT>IP**™ APP FOR ANDROID AND iOS.
8 USERS PER HOUSEHOLD CAN INDEPENDENTLY WATCH TV**

SAT>IP FEATURES

4 sat input
Up to 16 IP streams
Up to 8 devices per output

INDEX

 | MULTISWITCHES & SCR

- **SAT>IP™** 82
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 - Power Supply 89
 - Satellite IF Amplifiers 90
 - Satellite Splitters 91
 - Satellite Taps 91
 - Additional products 92
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-

Multiswitches & SCR

SAT>IP™

NEW

SAT>IP™ enables you to watch satellite TV on your smart phone, tablets, PC and also your standard TV as well as smart TV. SAT>IP™ is a revolutionary technology for the cost-effective distribution of satellite signals via in-home or private IP networks.

This SAT>IP™ enabled multiswitch is the perfect solution to provide TV signals over Ethernet or WiFi. All channels available over satellite can be followed on hand-held devices, smartphones and tablets, using the SAT>IP™ app for Android and iOS.

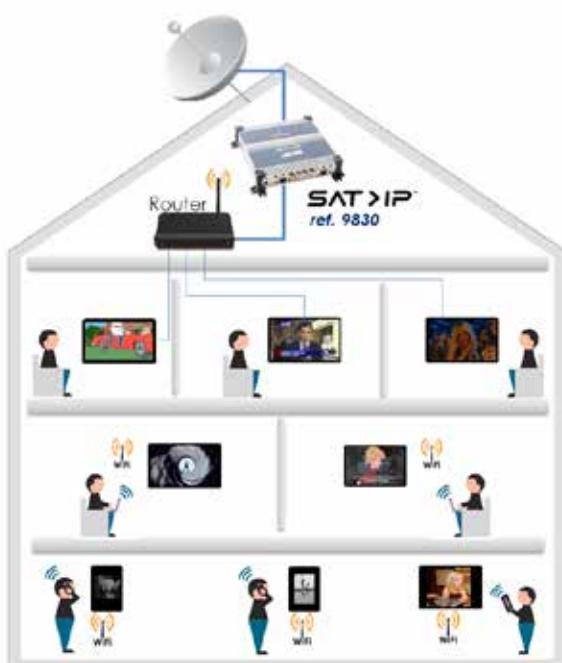
The SAT>IP™ multiswitch is equipped with Power over Ethernet (PoE), making an external power supply or adapter superfluous. In case the routers or switches in the building are not yet PoE-enabled, an optional PoE power supply can be delivered to power the unit.

This scalable multiswitch system can receive signals from 4 satellite bands and can distribute up to 16 IP streams through 2 Gigabit Ethernet ports. This means 8 users per household can independently watch TV!

- ▶ 4 LNB inputs for Quattro or Quad LNB
- ▶ 4 Trunk outputs for cascading with any type of Multiswitch, as well in new or existing installations
- ▶ 2 IP outputs, each supporting up to 8 independent users on a gigabit network
- ▶ streams satellite TV (SD and HD) and radio over IP



9830	
Inputs	-
Outputs	-
Frequency	MHz
Users/output	MHz
Protocol	-
Addressing	-
PoE Powered Device	-
Max. input level	dBµV
Min. input level	dBµV
Trunk loss	dB
Return loss in/out	dB
Power supply (PoE)	VDC
Max. power consumption on each output port	W
Operating temperature	°C
Dimensions	mm



Multiswitches & SCR



SCR Multiswitch

The new range of SCR multiswitches has arrived! In most installations, the cost of coaxial cables can take big proportions. By using the new range of Johansson SCR multiswitches, this cost can be divided by 3!

The devices have 4/8 or 16 satellite inputs and an LTE-protected passive terrestrial input. All outputs can operate in SCR mode or in legacy mode. Thanks to the legacy support, the multiswitch can be used even if no SCR set-top boxes are installed yet, making it a very flexible solution.

Use the Johansson programmer (ref. 9703) with manual selection to switch between legacy and SCR mode. See application on page 84 (default position is SCR mode).



9740D | 9742D

- ▶ 4 satellite inputs and LTE protected passive terrestrial input
- ▶ ref. 9740D: 4 outputs (up to 12 SCR tuners or 4 Legacy)
- ▶ ref. 9742D: 8 outputs (up to 24 SCR tuners or 8 Legacy)
- ▶ wide range of satellite input levels (60 to 91 dB_pV) ensures robust operation
- ▶ high output power (AGC controlled)
- ▶ supports auto-tuning of set-top boxes
- ▶ low trunk-loss (ideal for cascading several multiswitches)
- ▶ multistandard support: EN50494/Legacy
(backwards compatible with old set-top boxes)
- ▶ DC input for LNB powering: use optional 9933/9933UK if needed



9740D | 9742D

Inputs	-	1 x Terrestrial 4 x Satellite	
Outputs	-	4 outputs (up to 12 SCR tuners or 4 Legacy)	8 outputs (up to 24 SCR tuners or 8 Legacy)
Frequency	MHz	Ter.: 5.790 (LTE protected) SAT: 950-2150	
SCR channels	MHz	1280/1382/1484	
Supported standards	-	EN50494 / Legacy	
Max. input level SAT	dB _p V	91	
Max. output level SAT	dB _p V	SCR mode: 90 Legacy mode: 80	
Trunk loss (only sat.)	dB	SAT: 2	SAT: 2,5
Return loss in/out	dB	> 10	
Tap loss (Terrestrial)	dB	typ. 24	
LNB remote current	mA	500	
STB current	mA	180	
Operating temperature	°C	-20 to +50	
Dimensions	mm	122 x 158 x 50	202 x 158 x 50

Multiswitches & SCR

SCR Multiswitch



- ▶ 8 satellite inputs (2 satellite positions) and LTE protected passive terrestrial input
- ▶ ref. 9750D: 4 outputs (up to 12 SCR tuners or 4 Legacy)
- ▶ ref. 9752D: 8 outputs (up to 24 SCR tuners or 8 Legacy)
- ▶ wide range of satellite input levels (-70 to 100 dB_pV) ensures robust operation
- ▶ high output power (AGC controlled)
- ▶ supports auto-tuning of set-top boxes
- ▶ low trunk-loss (ideal for cascading several multiswitches)
- ▶ multistandard support: EN50494/Legacy/CLC-TS50607 (backwards compatible with old set-top boxes)
- ▶ DC input for LNB powering: use optional 9933/9933UK if needed

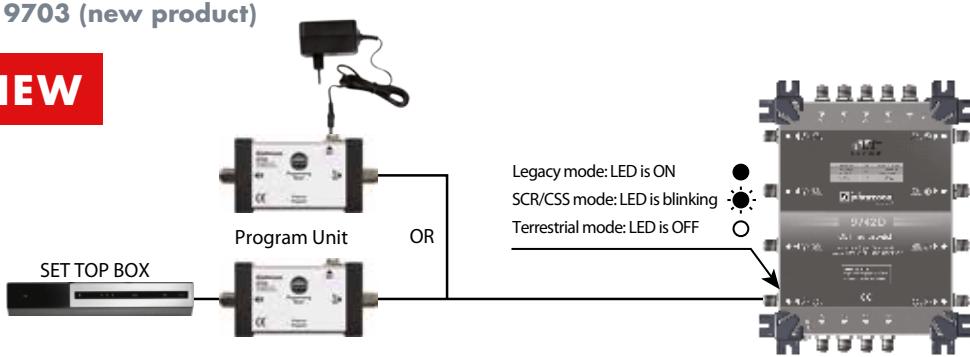
9750D | 9752D



	9750D		9752D
Inputs	-		1 x Terrestrial 8 x Satellite (2 satellite positions)
Outputs	-		4 outputs (up to 12 SCR tuners or 4 Legacy) 8 outputs (up to 24 SCR tuners or 8 Legacy)
Frequency	MHz		Ter.: 5-790 (LTE protected) SAT: 950-2150
SCR channels	MHz		1280/1382/1484
Supported standards	-		EN50494 / Legacy / TS 50607
Max. input level SAT	dB _p V		100
Max. output level SAT	dB _p V		SCR mode: 90 Legacy mode: 80
Trunk loss (only sat.)	dB		SAT: 3
Return loss in/out	dB		> 10
Tap loss (Terrestrial)	dB		typ. 24
LNB remote current	mA		500
STB current	mA		235
Operating temperature	°C		-20 to +50
Dimensions	mm		222 x 222 x 50

Programmer for SCR/Legacy mode: works with 9740D/9742D/9750D/9752D/9760D/9762D.
ref. 9703 (new product)

NEW



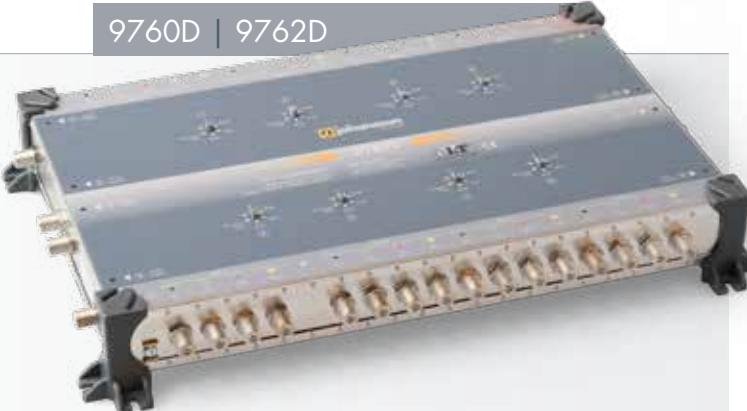
Multiswitches & SCR

SCR Multiswitch

J johansson



9760D | 9762D



- ▶ 16 satellite inputs (4 satellite positions) and LTE protected passive terrestrial input
- ▶ ref. 9760D: 4 outputs (up to 12 SCR tuners or 4 Legacy)
- ▶ ref. 9762D: 8 outputs (up to 24 SCR tuners or 8 Legacy)
- ▶ wide range of satellite input levels (70 to 100 dB_PV) ensures robust operation
- ▶ high output power (AGC controlled)
- ▶ supports auto-tuning of set-top boxes
- ▶ low trunk-loss (ideal for cascading several multiswitches)
- ▶ multistandard support: EN50494/CLC-TS 50607/Legacy (backwards compatible with old set-top boxes)
- ▶ switches to select input mode when working in EN50494: A/A+B/A+C/A+D/Terrestrial Only (selectable for each output)
- ▶ DC input for LNB powering: use optional 9933/9933UK if needed

		9760D		9762D
Inputs	-	1 x Terrestrial 16 x Satellite (4 satellite positions)		
Outputs	-	4 outputs (up to 12 SCR tuners or 4 Legacy)		8 outputs (up to 24 SCR tuners or 8 Legacy)
Frequency	MHz	Ter.: 5-790 (LTE protected) SAT: 950-2150		
SCR channels	MHz	1280/1382/1484		
Supported standards	-	EN50494 / TS 50607 / Legacy		
Max. input level SAT	dB _P V	100		
Max. output level SAT	dB _P V	SCR mode: 90 Legacy mode: 80		
Trunk loss (only sat.)	dB	SAT: 3		
Return loss in/out	dB	> 10		
Tap loss (Terrestrial)	dB	typ. 24		
LNB remote current	mA	500		
STB current	mA	250		
Operating temperature	°C	-20 to +50		
Dimensions	mm	350 x 222 x 50		

Multiswitches & SCR

SCR Multiswitch

The 9730 I is a 4 x 1 cascadable SCR multiswitch with 4 user bands, following the CENELEC EN50494 standard. The product is perfectly fitted for the markets with the user bands on frequencies 1210/1420/1680/2040 MHz.



9730I



- ▶ 4 satellite inputs
- ▶ compatible with CENELEC EN50494
- ▶ user band frequencies: 1210/1420/1680/2040 MHz
- ▶ DC power pass for LNB powering
- ▶ high output power (AGC controlled)
- ▶ supports auto-tuning of set-top boxes
- ▶ low trunk-loss (ideal for cascading several multiswitches)
- ▶ delivered with wall mounting tool

9730I

	9730I
Inputs	-
Cascade outputs	4 x satellite
Frequency	MHz
	950-2150
Outputs	-
User bands	4
SCR channels	MHz
	1210/1420/1680/2040
Supported standards	-
EN50494	EN50494
Max. input level SAT	dBµV
95	
Max. output level SAT	dBµV
90	
Trunk loss	dB
< 1 dB	
Return loss in/out	dB
> 12	
LNB remote current	mA
500	
STB current	mA
Max. 200	
Operating temperature	°C
-20 to +50	
Dimensions	mm
	104 x 75 x 35

Power Inserter

Blocks DC from STB, while forwarding DiSEcQ from STB to the multiswitch.

9915



9915

	9915
Frequency	5-2150
Insertion Loss	dB
1,5	
Return loss in/out	dB
> 10	
DC supply voltage	V
15	
Output current	A
1 max. (fuse protected)	
Dimensions	mm
	90 x 40 x 23

Multiswitches & SCR



Smart Splitter

Standard splitters can give collisions when two commands come at the same time or when one of the set-top boxes uses a permanent high voltage. A smart splitter captures the commands of the different set-top boxes and serializes them to guarantee no collisions happen.



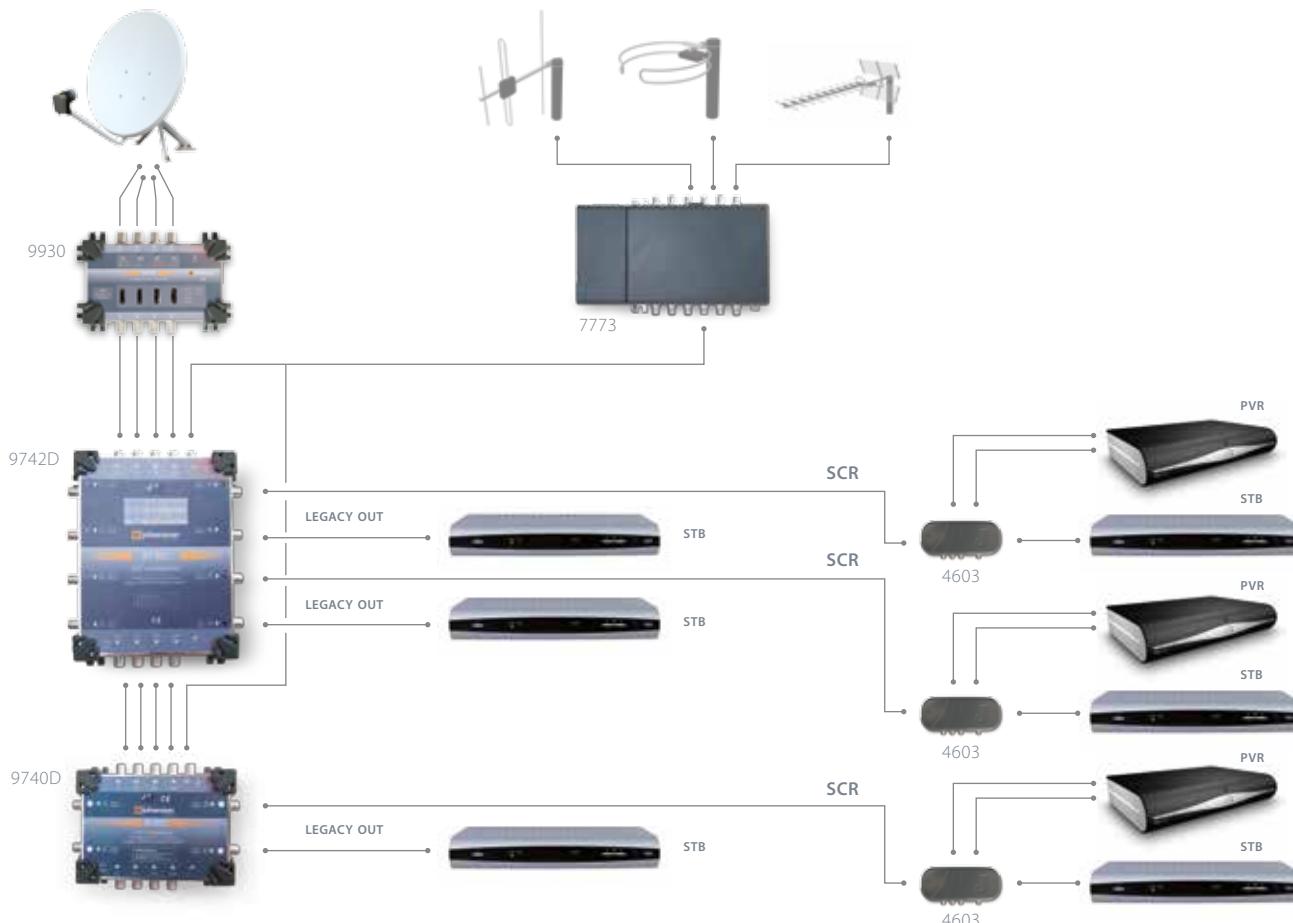
4603



- ▶ indoor housing
- ▶ 3-way
- ▶ no power adapter needed
- ▶ buffers and sends out the different command signals

4603

Way	-	3
Frequency	MHz	5-2150
Insertion Loss	dB	9
Return loss in/out	dB	> 10
DC power pass	mA	500 max.
Input voltage	VDC	10 min. / 20 max.
Message buffer	-	3/receiver port
Dimensions	mm	40 x 68 x 140



Multiswitches & SCR

Multi Band Converter (Stacker-Destacker)

The Stacker-Destacker is the perfect solution to upgrade an old single-cable system with a twin (or quad) LNB to be used in combination with a dual input receiver (PVR) or 2 separate single input receivers. The advantage of using the Stacker-Destacker is that you don't need an additional cable. The Stacker converts the frequencies of the second input, so it is literally stacked above the frequencies of the first input. The Destacker converts the frequencies back to the original ones.

This new version of the Stacker-Destacker doesn't need an additional power adapter. Thanks to the built-in attenuator with adjustment, it is protected against high input signals, avoiding saturation of the device.

9645 KIT

- ▶ no power adapter needed! Power the device with the satellite receiver.
- ▶ built-in adjustable attenuator to protect against high input signals
- ▶ Transparent for unidirectional DiSEqC®
(receive signals from up to 4 satellites)
- ▶ wide band 5-2150 MHz to combine terrestrial signals (FM, DAB, TV)
- ▶ no additional coax cable needed between dish and receiver
- ▶ no need to replace the existing cable
- ▶ transparent system
- ▶ no degradation of picture
- ▶ HD compliant



Stacker



Destacker

9645 KIT

	Stacker	Destacker
Input	-	2
Input frequency	MHz	5-3550 MHz with "F" High Quality connector
Output	-	1
Output	MHz	5-2150 MHz / 950-2150 MHz
Insertion loss/gain	dB	-1 @ 5-862 MHz -3 @ 950-2150 MHz Converted Sat.Pos. 1 (0 dB)= +6 Converted Sat. Pos. 2 (10 dB att.)= +4
Max. Input level	dBµV	pos. 1 (0 dB) = 88 Pos. 2 (10 dB att.) = 98
Consumption	W	160 max. Optional power adapter available for more LNB current. Ø 2.1 mm
Dimensions	mm	125 x 115 x 45
General specification	-	Operating system up to 75 m CT100 or 17 VAIC coaxial cable

Multiswitches & SCR



Power Inserter

The 9930 is a satellite power inserter, which can be used to ensure a universal LNB is locked on the correct satellite band. Each of the 4 inputs can be configured to deliver the desired control signals (13/18V + 0/22 kHz). The selected control signal is indicated by a bi-color LED.

- ▶ 4 satellite inputs / 4 satellite outputs
- ▶ frequency range: 5-2150 MHz
- ▶ current/input: up to 350 mA
- ▶ low insertion loss: <1 dB
- ▶ independent satellite band for each input (indicated by bi-color LED)



9930 | 9930UK

Inputs	-	4
Frequency range	MHz	5 - 2150
Insertion loss	dB	< 1
Isolation between ports	dB	> 35
Return loss	dB	> 10
Control signals	VDC	switchable : 13/18/13 + tone/18 + tone
Added power supply adapter	-	20V - 1A
Dimensions	mm	158 x 102 x 51

Power Supply

- ▶ compatible with:
 - ▶ 9740D/9742D/9750D/9752D/9760D/9762D
 - ▶ 9934/9935

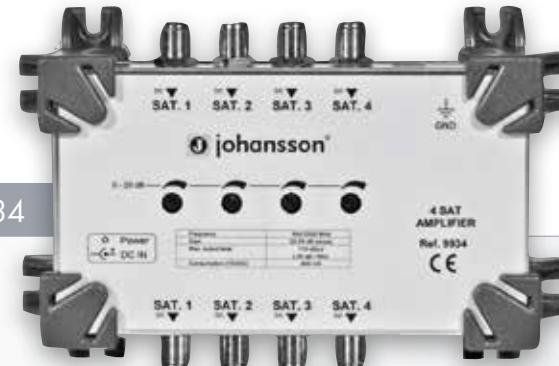


9933 | 9933UK

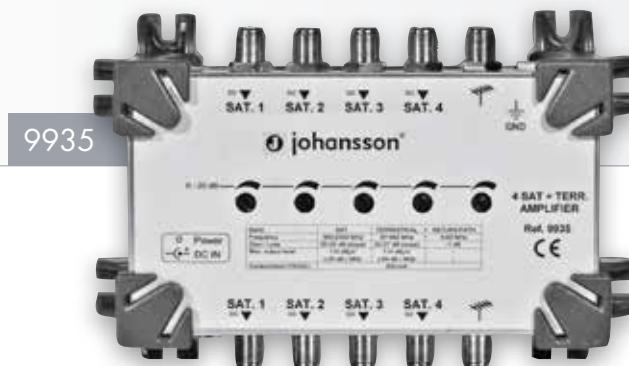
AC input	-	230 V~/50 Hz
DC output	VDC	15
Max. Output/ current	A	2
Connector	mm/female	Jack 2,1
Dimensions	mm	176 x 71 x 47

Multiswitches & SCR

Satellite IF Amplifiers



- separate adjustment for gain and slope on every line
- DC input for powering trunk line amplifiers & LNB



	9934	9935
Inputs	-	4 SAT
Outputs	-	4
Frequency range	MHz	950-2300 Sat.: 950-2300 MHz Terr.: 5-65 MHz + 87-862 MHz
Gain	dB	20-25 dB (sloped) Sat.: 20-25 dB(sloped) Terr.: 87-862 MHz - 20-27 dB (sloped) return path: - 1 dB
Noise figure	dB	5 Sat.: 5 dB - Terr.: 6 dB
Gain adjustment	dB	20 Sat.: 20 dB - Terr.: 20 dB
Max. Output level	-	110 dB _P V (-35 dB/IM3) Sat.:110 dB _P V (-35 dB/IM3) Terr.: RP: passive 87-862 MHz: 114 dB _P V (-54 dB/IM3)
Consumption	-	400 mA from 15 VDC external power supply or input/output 500 mA from 15 VDC external power supply or input/output
Dimensions	mm	158 x 102 x 51

Multiswitches & SCR

Satellite Splitters



- 2-way satellite splitter
- terrestrial input/output (ref. 9937)
- DC power pass
- 5 dB loss



9936 | 9937

Nb of inputs	-	4 SAT	4 SAT + 1 Terr
Nb of outputs	-	2 x 4	2 x 5
Frequency range	MHz	950-2300	Sat.: 950-2300 Terr.: 5-862
Loss	dB	5	Sat.: 5 - Terr.: 5
DC power pass in / out	-	yes	yes
Dimensions	mm	158 x 142 x 51	158 x 162 x 51

Satellite Taps



- 2-way satellite tap
- terrestrial input/output (ref. 9939)
- DC power pass
- loss: 10 dB (tap loss) / 1 dB (through loss)



9938 | 9939

Nb of inputs	-	4 SAT	4 SAT + 1 TERR
Nb of outputs	-	4 taps/ 4 through	5 taps/ 5 through
Frequency range	MHz	950-2300	Sat.: 950-2300 Terr.: 5-862
Tap loss	dB	-10	Sat.: -10 Terr.: -13
Through loss	dB	-1	Sat.: -1 Terr.: -1
DC power pass in/tap/out	-	yes	yes
Dimensions	mm	142 x 158 x 51	142 x 158 x 51

Multiswitches & SCR

Additional products

MULTISWITCH

4+1				8+1			
4 outputs		Sat.	Ter.	4 outputs		Sat.	Ter.
9940	cascadable	-20 dB	-25 dB	9970	cascadable	-20 dB	-25 dB
9941	cascadable	-15 dB	-20 dB	9971	cascadable	-15 dB	-20 dB
9942	cascadable	-10 dB	-15 dB	9972	cascadable	-10 dB	-15 dB
9943	end unit	-5 dB	-15 dB	9973	end unit	-5 dB	-15 dB
9943A	stand-alone	End unit ref. 9943 + Power supply ref. 9933 • UK version: ref. 9943A UK		9973A	stand-alone	End unit ref. 9973 + Power supply ref. 9933 • UK version: ref. 9973A UK	
6 outputs		Sat.	Ter.	6 outputs		Sat.	Ter.
9944	cascadable	-20 dB	-25 dB	9974	cascadable	-20 dB	-25 dB
9945	cascadable	-15 dB	-20 dB	9975	cascadable	-15 dB	-20 dB
9946	cascadable	-10 dB	-15 dB	9976	cascadable	-10 dB	-15 dB
9947	end unit	-5 dB	-15 dB	9977	end unit	-5 dB	-15 dB
9947A	stand-alone	End unit ref. 9947 + Power supply ref. 9933 • UK version: ref. 9947A UK		9977A	stand-alone	End unit ref. 9977 + Power supply ref. 9933 • UK version: ref. 9977A UK	
8 outputs		Sat.	Ter.	8 outputs		Sat.	Ter.
9948	cascadable	-20 dB	-25 dB	9978	cascadable	-20 dB	-25 dB
9949	cascadable	-15 dB	-20 dB	9979	cascadable	-15 dB	-20 dB
9950	cascadable	-10 dB	-20 dB	9980	cascadable	-10 dB	-20 dB
9951	end unit	-5 dB	-20 dB	9981	end unit	-5 dB	-20 dB
9951A	stand-alone	End unit ref. 9951 + Power supply ref. 9933 • UK version: ref. 9951A UK		9981A	stand-alone	End unit ref. 9981 + Power supply ref. 9933 • UK version: ref. 9981A UK	
12 outputs		Sat.	Ter.	12 outputs		Sat.	Ter.
9952	cascadable	-20 dB	-25 dB	9982	cascadable	-20 dB	-25 dB
9953	cascadable	-15 dB	-20 dB	9983	cascadable	-15 dB	-20 dB
9954	cascadable	-10 dB	-20 dB	9984	cascadable	-10 dB	-20 dB
9955	end unit	-5 dB	-20 dB	9985	end unit	-5 dB	-20 dB
9955A	stand-alone	End unit ref. 9955 + Power supply ref. 9933 • UK version: ref. 9955A UK		9985A	stand-alone	End unit ref. 9985 + Power supply ref. 9933 • UK version: ref. 9985A UK	
16 outputs		Sat.	Ter.	16 outputs		Sat.	Ter.
9956	cascadable	-20 dB	-25 dB	9986	cascadable	-20 dB	-25 dB
9957	cascadable	-15 dB	-25 dB	9987	cascadable	-15 dB	-25 dB
9958	cascadable	-10 dB	-25 dB	9988	cascadable	-10 dB	-25 dB
9959	end unit	-5 dB	-25 dB	9989	end unit	-5 dB	-25 dB
9959A	stand-alone	End unit ref. 9959 + Power supply ref. 9933 • UK version: ref. 9959A UK		9989A	stand-alone	End unit ref. 9951 + Power supply ref. 9933 • UK version: ref. 9989A UK	

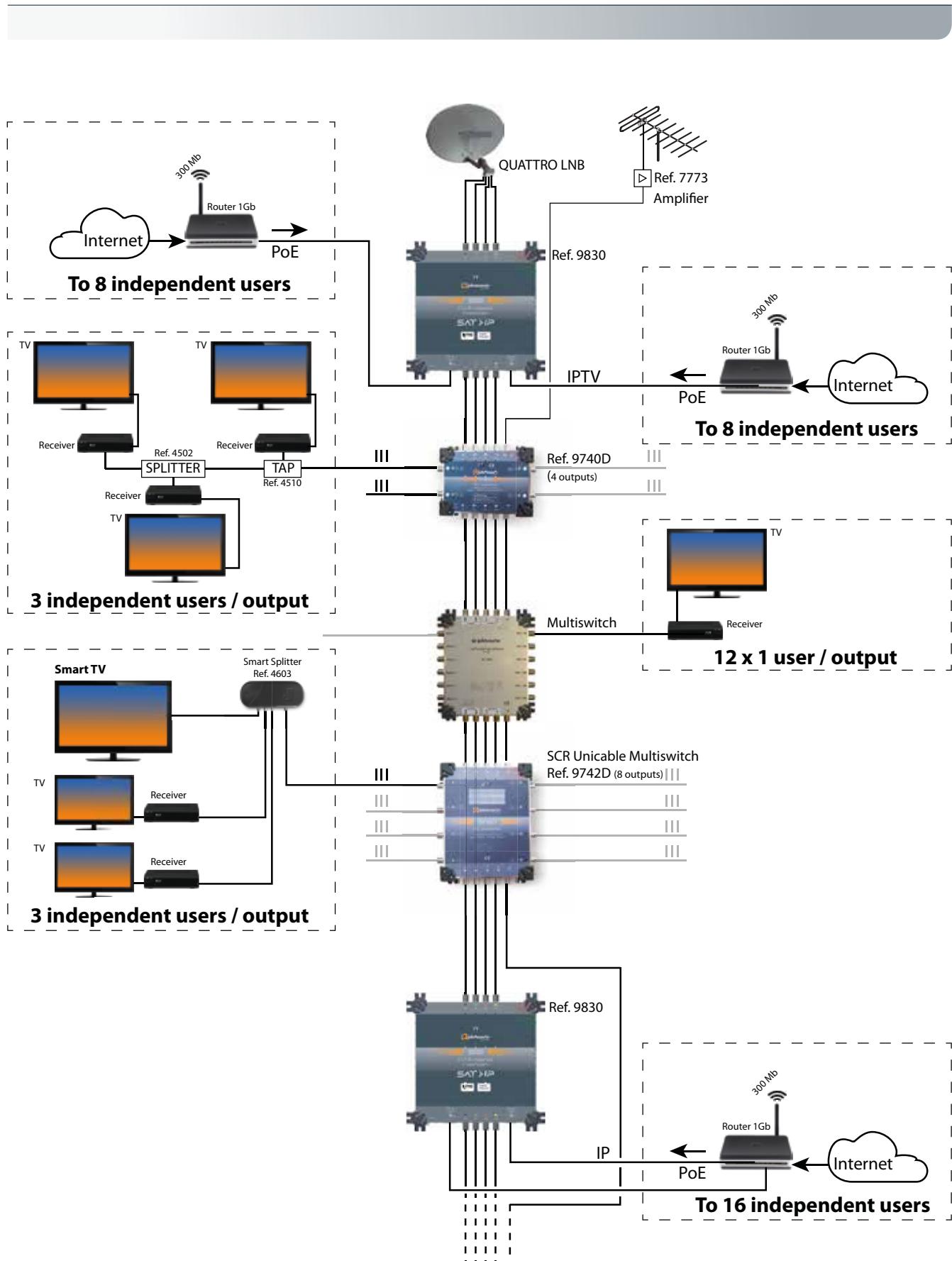
ACTIVE SPLITTER

4492	2 Way Splitter	40 MHz - 3,6 GHz, 2 dB gain
4494	4 Way Splitter 3,6 GHz	40 MHz - 3,6 GHz, 2 dB gain
4498	8 Way Splitter 3,6 GHz	40 MHz - 3,6 GHz, 3 dB loss

For more information please send an e-mail to sales@unitrongroup.com or visit our website www.unitrongroup.com.

Multiswitches & SCR

Application



1000		5302 S	6	6606	41	8550 D	28	9943	92
1200 A	73	5302 T	6	6610	43	8555	28	9943 A	92
1269	73	5303 Q	6	6611	43	9000		9944	92
1281	73	5303 S	6	6620	36	9208	74	9945	92
1282	78	5303 T	6	6620 UK	36	9208 E	78	9946	92
1352	73	5310 Q	7	6621	37	9209	78	9947	92
1353	73	5311 Q	7	6621 UK	37	9209 E	78	9947 A	92
1464	73	5330	8	6622	36	9210	74	9948	92
		5352 Q	9	6622 UK	36	9000		9949	92
2000		5352 S	9	6623	37	9210 E	78	9950	92
2425	65	5352 T	9	6623 UK	37	9213	78	9951	92
2426	66	5353 S	9	6630	34	9214	78	9951 A	92
2434	66	5353 T	9	6630 UK	34	9215	78	9952	92
		5353 Q	9	6631	34	9215 E	78	9953	92
4000		5360 Q	10	6631 UK	34	9216	78	9954	92
4492	92	5361 Q	10			9218	78	9955	92
4494	92	5380	11	7000		9219	78	9955 A	92
4498	92	5400	21	7211	67	9222	78	9956	92
4502	72	5950	19	7310	67	9223	78	9957	92
4503	72			7316	67	9224	78	9958	92
4504	72	6000		7317	75	9337	77	9959	92
4506	72	6006 F	78	7320	67	9412	78	9959 A	92
4508	72	6020	78	7320 A	67	9501	75	9970	92
4510	78	6022GSM	70	7322	67	9506	75	9971	92
4511	78	6023C57	70	7325 A	67	9507	78	9972	92
4512	78	6023C58	70	7327	62	9509	78	9973	92
4513	78	6023C59	70	7328	62	9602	76	9973 A	92
4520	78	6024C58	71	7403 A	67	9604	75	9974	92
4521	78	6024C59	71	7410	67	9609	76	9975	92
4522	78	6025C60	71	7415	67	9613	76	9976	92
4523	78	6030C58	71	7415 L	63	9614	78	9977	92
4524	78	6040C58	71	7441	67	9614 E	78	9977 A	92
4540	78	6040C59	71	7460	63	9615	78	9978	92
4541	78	6050 E	78	7462	64	9617	75	9979	92
4542	78	6503	45	7463	65	9620	77	9980	92
4543	78	6503 UK	45	7708	67	9631	77	9981	92
4544	78	6504	45	7710	67	9645 KIT	88	9981 A	92
4561	78	6504 UK	45	7718	67	9730 I	86	9982	92
4562	78	6505	46	7720	66	9740 D	83	9983	92
4563	78	6505 UK	46	7720L	56	9742 D	83	9984	92
4581	78	6506	47	7722	66	9637	75	9985	92
4582	78	6506 UK	47	7722L	56	9750 D	84	9985 A	92
4583	78	6510 A	50	7760A	67	9752 D	84	9986	92
4603	87	6520	44	7761A	67	9760 D	85	9987	92
		6550 A	50	7762A	67	9762 D	85	9988	92
5000		6554	50	7773	64	9830	82	9989	92
5050 ETH	16	6555 A	50	7773 UK	64	9915	86	9989 A	92
5050 UK ETH	16	6556 A	50	7774	64	9920	74	KIT	
5051 ETH	16	6557 A	50	7774 UK	64	9930	89	KIT 7316/2430A	67
5051 UK ETH	16	6564	50	7775	64	9930 UK	89	KIT 7325/2425	67
5060 ETH	17	6565	48	7775 UK	64	9933	89	KIT 7327/2434	57
5062 ETH	17	6600	38			9933 UK	89	KIT 7328/2434	58
5062 UK ETH	17	6600 A	38	8000		9934	90	KIT 7404/2430A	67
5065 ETH	17	6600 UK	38	8500 D	26	9935	90	KIT 7415/2430A	67
5202	12	6601	40	8501	24	9936	91	KIT 7422/2430A	67
5203	12	6601 A	40	8505	26	9937	91	KIT 7422E/2430AE	67
5210	13	6601 UK	40	8506	24	9938	91	KIT 7460/2434	59
5211	13	6602	42	8530	30	9939	91	KIT 7462/2434	60
5230	14	6603	39	8530 UK	30	9940	92	KIT 7463/2434	61
5240	15	6604	49	8535	30	9941	92	KIT 7490/2430A	67
5302 Q	6	6605	42	8535 UK	30	9942	92		



UNITRON NV | Frankrijklaan 27 | B-8970 Poperinge | Belgium

T + 32(0)57 33.33.63 | F + 32(0)57 33.45.24

E-mail sales@unitrongroup.com | www.unitrongroup.com