

## UFOpro



### ▶ PLATFORM AT GLANCE

The UFOpro is the latest Kathrein headend platform for next generation hospitality television applications. The configurable modular chassis offers a range of input and output module options including Satellite (DVB-S/S2X), HDMI and IP reception as well as Cable (DVB-C/T) and IP outputs. Advanced architecture is designed to save space, energy and resources as well as to meet all requirements that a full hospitality network can have.

### ▶ APPLICATIONS

- Hospitality TV Systems
- Hotel TV
- DVB-C SMATV Headend
- Multi Subscriber Apartments (MDUs)

### ▶ HIGHLIGHTS

#### All in One Platform

Large selection of Input and Output modules including DVBS/S2, DVBC/T, HDMI and IP technologies for delivering TV and rich media experience.

#### Compact Chassis with 6 Module Slots

1RU mechanical housing with hot-swappable modules on rear panel and dual redundant PSU for highest reliability.

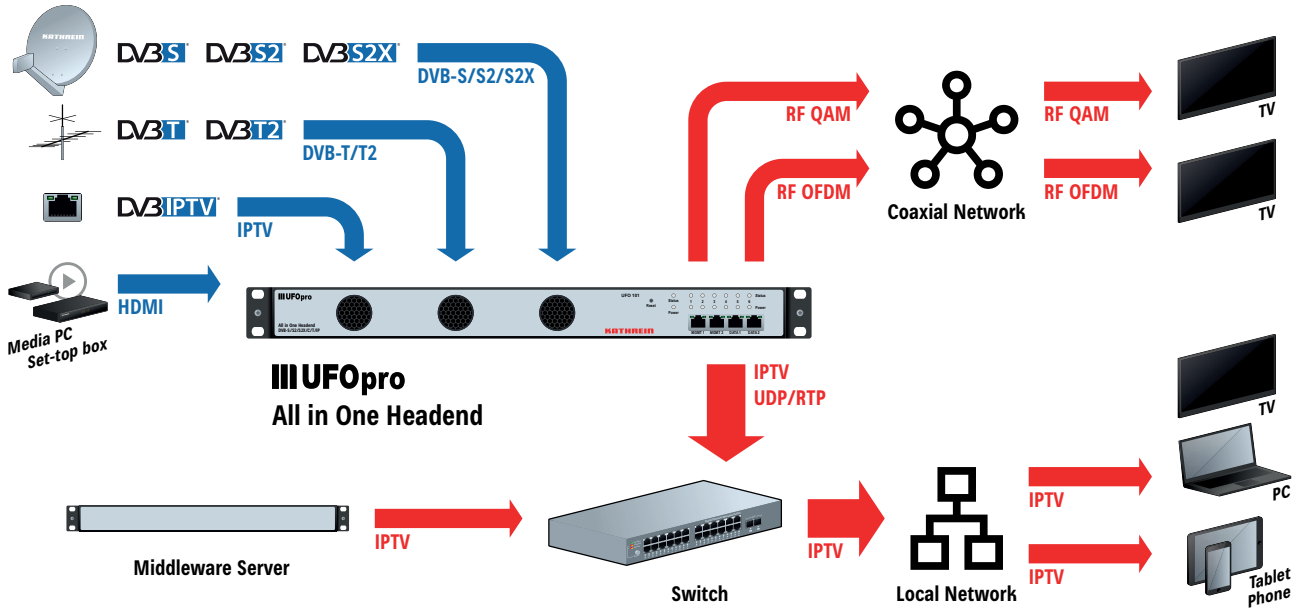
#### Future Proof Technologies

Built-in IP module to be used as IPTV Streamer up to 120 inputs and 120 outputs via 2 Gigabit RJ45 ports.

#### Easy Installation | Centralized Management

Intuitive and advanced web interface for local and remote management. PID and LCN functions for central service management.

## APPLICATION DRAWING



## Technical Data

Head Unit		
Slots		6 Slots (hot swappable modules)
Input/Output		4x RJ45 (Gigabit Ethernet)   2x Data (IN/OUT)/2x MGMT
Protocol		UDP/RTP
IP services		ARP, Ping
Transmission type		Unicast/Multicast
Transport stream		120x SPTS IN/OUT   MPTS
System Data		
Power Supply		Dual Redundant
Power	W	120
Input Voltage	V/AC	100-240
Operating Temperature	°C	0-50
Operating Humidity	%	< 95
Weight	kg	
Dimension	mm (WxHxD)	482,6 x 44,5 x 435   1RU

0123/Datasheet\_GB | Any previous data sheet issues have now become invalid. | Subject to change.

## Receiver and Endcoder Modules

### > UFO 110/8 | 206500020



### > Features

- Input 8 channel DVB-S/S2/S2x FTA
- Occupies two slots
- Setup via web interface UFO 101

### > Technical Data

Inputs		
Sat-IF input		8x F connectors, 75 Ω
Frequency range	MHz	950–2150
Signal level	dBm	-70~20
Roll off factor		0.15/0.20/0.25/0.35
DiSEqC™1.0		vert./horiz., low/high; sat. pos. (A/B/C/D)
Switching levels	V/kHz	14/18, 0/22
Remote feed current for LNB	mA	max. 400 (Independent for each LNB)
Demodulation DVB-S/S2/S2x		
Number of tuner		8
Compliance	DVB-S/S2/S2X	EN 300 421 / EN 302 307-1V1.4.1 / EN 302 307-2V1.1.1
Modulations-Standards	DVB-S	QPSK, 8PSK
	DVB-S2	QPSK, 8PSK, 16APSK, 32APSK
	DVB-S2X	QPSK, 8PSK, 16APSK, 32APSK, 64APSK
Symbol rate	DVB-S MS/s	1~45
	DVB-S2 MS/s	1~45
	DVB-S2S MS/s	1~34
FEC (Normal FEC FECFRAME)	DVB-S	1/2, 2/3, 3/4, 5/6, 7/8
	DVB-S2	1/2, 3/5, 2/3, 3/4, 4/5, 5/6, 8/9, 9/10
	DVB-S2X	11/15, 7/9, 4/5, 5/6
Power	W	30

## UFO 111/4 | 206500019



### Features

- Input 4 channel DVB-S/S2/S2x CI
- 2 PCMCIA CI Slots
- Occupies one Slot
- Setup via web interface UFO 101

### Technical Data

Inputs		
Sat-IF input		2x F connectors, 75 Ω
Frequency range	MHz	950–2150
CAM		2x PCMCIA CI slots
Signal level	dBm	-70~20
Roll off factor		0.15/0.20/0.25/0.35
DiSEqC™1.0		vert./horiz., low/high; sat. pos. (A/B/C/D)
Switching levels	V/kHz	14/18, 0/22
Remote feed current for LNB	mA	max. 400 (Independent for each LNB)
Demodulation DVB-S/S2/S2x		
Number of tuner		4
Compliance	DVB-S/S2/S2X	EN 300 421 / EN 302 307-1V1.4.1 / EN 302 307-2V1.1.1
Modulations-Standards	DVB-S	QPSK, 8PSK
	DVB-S2	QPSK, 8PSK, 16APSK, 32APSK
	DVB-S2X	QPSK, 8PSK, 16APSK, 32APSK, 64APSK
Symbol rate	DVB-S MS/s	1~45
	DVB-S2 MS/s	1~45
	DVB-S2S MS/s	1~34
FEC (Normal FEC FECFRAME)	DVB-S	1/2, 2/3, 3/4, 5/6, 7/8
	DVB-S2	1/2, 3/5, 2/3, 3/4, 4/5, 5/6, 8/9, 9/10
	DVB-S2X	11/15, 7/9, 4/5, 5/6
Power	W	22

## > UFO 131/4 | 206500023



## > Features

- Input 4 channel DVB-T/T2 CI
- 2 PCMCIA CI Slots
- Occupies one Slot
- Setup via web interface UFO 101

## > Technical Data

Inputs		
Sat-IF input		2x F connectors, 75 Ω
Frequency range	MHz	47–862
CAM		2x PCMCIA CI slots   Support mainstream CAS
Signal level	dBm	-80~20
Bandwidth	MHz	6/7/8
Remote feed current Antenna	mA	max. 50 (Independent for each Antenna)
Demodulation DVB-T/T2		
Number of tuner		4
Compliance	DVB-T/T2	EN 300744 / EN 302755-V1.31
Modulations-Standards	DVB-T	QPSK/16QAM/64QAM
	DVB-T2	QPSK/16QAM/64QAM/256QAM
Guard Intervall	DVB-T MS/s	1/4, 1/8, 1/16, 1/32
	DVB-T2 MS/s	1/4, 1/8, 1/16, 1/32, 1/128, 19/256, 19/128
FFT Size	DVB-T	2K, 8K
	DVB-T2	1K, 2K, 4K, 8K, 16K, 32K
Power	W	22

## ➤ UFX 150/4 | 206500022



## ➤ Features

- 4 HDMI Encoder)
- Occupies one Slot
- Setup via web interface UFO 101

## ➤ Technical Data

Input		
HDMI		4x female connectors V1.4
Video		H.264/AVC HD: MP/HP@L4.0 SD: MP/HP@L3.0 MPEG-2 SD: MP@ML
Resolution		SD: 576i50, 480i59.94 HD: 1080p-25/30/50/59.94/60 1080i-50/59.94/60 720p-50/60 *Output resolution supports up to 1920*1080p30
Bitrate control		CBR
Video Bitrate	Kbps	1.000~14.000
GOP Structure		IBBP, IPPP, IBP
GOP Size		6~63
Aspect Ratio		Automatic or Manual
Audio		MPEG-1 Layer II, AC3
Audio Bitrate	Kbps	32~384
Audio Mode		Stereo (2.0, including downmix)
Audio Sampling Rate	kHZ	48
Audio Volume Leveling	dB	-20~20
Power	W	12

## DVB/IP Output Modules

➤ UFO 220/16 | 206500021



### ➤ Features

- Output 16 channel (flexibly configurable)
- Occupies one Slot
- Setup via web interface UFO 101

### ➤ Technical Data

Output		
QAM Output		1x F connectors, 75 Ω
Frequency range	MHz	47–862
Output level	dBm	max. 106 dBμV
Bandwidth	MHz	6/7/8
Ethernet		RJ45 (Reserved for scrambling)
Demodulation DVB-C		
Number of Output channels		16   flexibly configurable
Compliance		ITU-T J.83 Annex A/B/C
Modulations-Standards	QAM	6/32/64/128/256
Symbol rate	MS/s	3.6–6.9
MER	dB	> 40dB
Power	W	QAMA: 22   QAMB: 28

## UFO 230/8 | 206500024



## Features

- Output 8 OFDM channel (flexibly configurable)
- Occupies one Slot
- Setup via web interface UFO 101

## Technical Data

Output		
QAM Output		1x F connectors, 75 Ω
Frequency range	MHz	47–862
Output level	dBm	max. 105 dBμV
Bandwidth	MHz	6/7/8
Demodulation DVB-T		
Number of Output channels		8   flexibly configurable
Compliance		ETSI EN 300744
Modulations-Standards	QAM	16/64/QPSK
Guard Intervals		1/4, 1/8, 1/16, 1/32
FFT Size		2k/8k
Code rate		1/2, 2/3, 3/4, 5/6, 7/8
MER	dB	> 42dB
Power	W	27



## > UFO 150 | 206500025



## > Features

- IP input/output module 128 SPTS IN/OUT
- Occupies one Slot
- Setup via web interface UFO 101

## > Technical Data

IP		
Network		3*GbE RJ45 ports
Other ports		1x USB 2.0 port (keyboard/mouse) 1x Mini HDMI port (Monitor) 1x Reset button
Input		UDP/RTP/HLS/SRT
Output		UDP/RTP/HLS/SRT
Processing Capability For Typical Applications	Mbps	UDP IN/UDP OUT: 350/350 UDP IN/HLS OUT: 350/800 SRT IN/UDP OUT: 100/100 HLS IN/UDP OUT: 200/200
Number of Channels		Input: UDP/RTP: 50, HLS: 50, SRT: 2 Output: UDP/RTP: 50, HLS: 100, SRT: 2
Power	W	16

## > UFO 66 | 206500026



- Cover plate