



# Modular reception system

## Quatro and twin IP DVB modulators

Converting of TS/IP input signal into 4 QAM/COFDM modulated DVB-C/J.83B/DVB-T/ISDB-T channels and 2 QPSK modulated DVB-S channels.

- SPTS or MPTS input stream
- MPTS service filtering
- PCR restamping
- RTSP protocol of video H.264/H.265, audio AAC conversion to transport stream
- SDP/SAP protocol support
- Web control and SNMP agent
- RF loop through input
- DIN rail or wall mounting
- robust die-cast housing
- connectors:
  - RF input/output - type F
  - Ethernet control, Ethernet stream input - RJ-45
  - USB - USB-A
  - screw terminal block for DC entry
  - power distribution bus

**miq440**  
DVB-C/J.83B modulator

**mix440**  
DVB-T/ISDB-T modulator

**mid420**  
DVB-S modulator



Technical specifications		T Y P E				miq440	mix440	mid420			
<b>Ordering number</b>		03870		03871		03873					
<b>IP input</b>	standard	IEEE802.3 100/1000 BaseT									
	bitrate	up to 200 Mbps									
	reception protocols	UDP/RTP, RTSP									
	MPTS	Yes									
	SPTS	Yes									
<b>RF output</b>	standard	pr. <b>DVB-C</b>		pr. <b>J.83B</b>		pr. <b>DVB-T</b>		pr. <b>ISDB-T</b>		pr. <b>DVB-S</b>	
	modulation	QAM16, QAM32, QAM64, QAM128, QAM256		QAM64, QAM256		QPSK, QAM16, QAM64		QPSK, QAM16, QAM64, DQPSK		QPSK	
	frequency range	96-862 MHz		170-230 MHz / 470-862 MHz		250-2350 MHz					
	channel allocation	adjacent						independent			
	channel count	4						2			
	level/impedance	90 ± 2 dBμV/75 Ω						80 ± 2 dBμV/75 Ω			
	TS bit rate	< 53 Mbit/s		< 31 Mbit/s		< 72 Mbit/s					
	MER	≥ 40 dB		≥ 35 dB		≥ 30 dB					
	channel bandwidth	pr. 4...8.3 MHz		7 MHz / 8 MHz		3...60 MHz					
	symbol rate	pr. 3.5...7.2 Ms/s		-		2...45 Ms/s					
	transmission mode	-		2K		-					
	total output level adjustment	pr. 0 ÷ -15.0 dB by 1 dB step									
	loop through frequency range/loss	45-862 MHz / ≤ 2.5 dB						45-2400 MHz / ≤ 5.0 dB			
	<b>Management port</b>	standard IEEE802.3 10/100 BaseT (independent on IP input)									
<b>Current consumption</b>	12 V 700 mA						12 V 1 A				
<b>Operating temperature range</b>	0° ÷ +50°C										
<b>Dimensions/Weight (packed)</b>	36x198x112 mm/0.84 kg						48.5x198x112 mm/1.06 kg				

pr. software control