



Applications

Studio Transmitter Link

Features

- Professional audio decoder
- ► Decodes up to 16 audio programs from a DVB transport stream
- ► Decodes elementary streams over IP
- ► Broadcast quality XLR-connectors
- ► Up to 16 RS.232 ports for RDS data (UECP)
- ► GPIO (4 outputs, 8 inputs)
- Programmable alarm array
- All bit rates are supported according to the respective standards
- ► 32 kHz, 48 kHz sampling rate
- ► 24 Bit D/A converter
- Remote controllable via Browser / SNMP
- ► Monitoring
- Axia® Livewire+™, RAVENNA / AES67, Dante®, SMPTE ST 2110-30, SMPTE ST 2110-31

Compression algorithms for TS

- ► MPEG-1/2 Layer 2
- AAC
- Enhanced aptX

Compression algorithms for ES

- ► Linear PCM
- ► MPEG-1/2 Layer 2/3
- ► AAC
- Enhanced aptX
- OPUS
- ► G.711
- ► G.722

Audio Decoder for multiple audio channels with IP input

The Q9X-D IP Audio Decoder enables you to decode up to 16 stereo channels digital AES/EBU or up to 8 analog stereo channels (analog and digital AES/EBU). It is possible to decode elementary streams as well as DVB compliant transport streams. Input signals coming via IP can be handled and decoded.

Audio Compression

The Q9X-D supports a wide range of industry standard audio codecs such as MPEG-1 Layer 2 and various AAC versions.

Support Options

We are convinced of the high quality of our products. Hence, we are granting 2 years warranty without making compromises.

For the time after that, we offer affordable subsequent contracts.

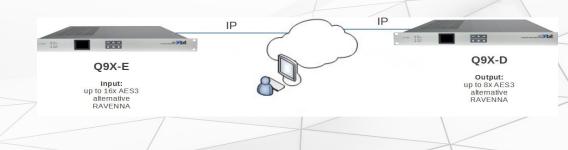
For optimal support and for software updates and upgrades we offer budget-friendly support contracts.

Ordering Options

The basic unit is licensed for one audio decoder channel, MPEG-1 Layer 2 and the functions RDS ancillary data (DVB standard ETSI TS 101 154) and GPIO. Further channels and options are possible.

- 2 years warranty
- o Hardware warranty extension up to 10 years
- Service Contract Basic (Updates, Email support) (mandatory)
- Service Contract Advanced (Updates, Emailand phone support, replacement devices etc.)

Legend: ► • Default ▷ ○ Optional



Specifications

Audio Output			
Digital	Up to 8 AES/EBU, electrical, XLR (IEC958)		
Analog	 Up to 4 XLR, electronically balanced, 0 to +18 dBu, adjustable in 0.5 dB steps Audio frequency range 20 Hz to 20 kHz (± 0.3 dB) Output Impedance: <= 50 Ω THD+N (1 kHz at max. level): < 0.01 % at 1 kHz Crosstalk attenuation at 1 kHz: > 100 dB Dynamic range: > 80 dB S/N ratio (weighted): > 80 dB 		
Audio channel configurations	► Mono L/R, L+R mix ► Dual Mono ► Stereo, Joint Stereo		
RAVENNA / AES67	Output of up to 16 stereo channels ► Formats: L16, L24, L32 ► Sampling rate: 32 kHz, 48 kHz ► SMPTE ST 2110-30 and SMPTE ST 2110-31 compatible		
Dante [®]			
Axia® Livewire+™			

Audio Compression	
Algorithms	 MPEG-1 Layer 2/3 (ISO/IEC 1172-3, 13818-3) MPEG-2 AAC-LC (ISO/IEC 13818-7) MPEG-4 AAC-LC, HE-AAC V1/V2, AAC-LD, AAC-ELD (ISO/IEC 14496-3) Enhanced aptX Linear PCM OPUS G.711, G.722
Bit rates	► All bit rates are supported according to the standards of the respective algorithms (32 – 384 kbps)
Sampling rate	32 kHz, 48 kHz
Ancillary data	 RS.232 interface Transport of ancillary data via UECP within the MPEG-2 transport stream Breakout cable (optional, 4 or 8 connectors, conversion from Sub D25 to Sub D9)

Transport Protocol	S
Over IP	 Input of DVB MPEG-2 transport streams including service information according to ETSI EN 300 468, compliant to "Pro-MPEG Code of Practice #3 release 2" ► FEC according to SMPTE ST 2022-1 (optional) ► Input of elementary streams ► Seamless Protection Switching according to SMPTE ST 2022-7 (optional) ► SRT

Network Interfaces

3 separate Ethernet interfaces (IEEE 802.3, RJ45, 100/1000 MBit/s)

- ► 2x Data (elementary / transport streams via IP)
- ► 1x Control (Web interface, SNMP and Ancillary Data)

System Configuration, Control and Monitoring

Via Ethernet by accessing the on-system HTTP web server with any Internet browser $\,$

REST API

SNMP traps and email notifications in case of triggered alarms

Via the front panel keyboard and display

Network condition monitoring

Silence detection (optional)

Power	Reau	ıirem	ent

Voltages	► 100 to 240 V +/- 10 %, 50 to 60 Hz
	-48 V DC (optional)
	Redundant power supply (optional)

Power consumption < 20 W

Physical Parameters

Chassis	19" rack mount cabinet, 1U
Size	➤ Width: 483 mm ➤ Depth: 360 mm ➤ Height: 44 mm
Weight	4.5 kg

Environmental Conditions

Operating temperature	-10 C to 45 C
Storage temperature	-20 °C to 70 °C
Humidity	< 95 % (non-condensing)

Datasheet version #3, December 2022 © Qbit GmbH - Errors and omissions excepted.



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