

QUANTUM2 XL Portable Audio and Video Codec

Remote Commentary Unit with optional Video encoder/decoder function

OVERVIEW

This unit includes 5 mic /line inputs and 4 headphone outputs. Additional sources to its embedded mixers are USB Audio, AES/EBU or AoIP/AES67 (DANTE or Ravenna optional) inputs.

The unit is built around two bidirectional stereo audio codecs and a video codec. The communication can follow either other BRAVE, SIP or RTP protocols. Video protocols available are BRAVE, SRT, RTMP/RTMPS and MPEG-TS.



APPLICATIONS

All-in-one box solution for remote commentaries linking two bidirectional audio streams with four independent voices /sounds /or mixed audios to the studio or Host Broadcast Center.

Additionally, a video downlink stream can be decoded internally and shown on a general purpose monitor, enriching the information supplied to the talents. Uplink video might be encoded.

Highly reliable transmissions are achieved using Diversity and Bonded streams over a group of network interfaces (2xEthernet, 8xLTE/5G, 1xWi-Fi).

Perfect sounds are encoded using a choice of advanced and low delay compression algorithms for sport and concerts.



SPECIFICATIONS

Specifications and designs are subject to change without notice.

AUDIO FEATURES		COMMUNICATIONS FEATURES	
AUDIO INPUTS	<ul style="list-style-type: none"> 5 Mic/Line with 48V phantom power (XLR connectors) 1 AES/EBU (XLR connector) 1 USB Stereo 8 chan. Dante/AES67 or Ravenna/AES67 (optional) 	IP PROTOCOL	<ul style="list-style-type: none"> Fully TCP/UDP/IP connectivity IP Unicast, Multicast and Multi-Unicast audio streaming transmission/reception Independent channels for transmission and reception SIP/SDP/RTP/STUN according to N/ACIP EBU Tech 3326 & 3368 FEC (Forward Error Correction) and Active Packet Recovery to recover from packet losses Automatic Jitter Buffer adjustment. BRAVE & SIP Diversity with two IP interfaces
AUDIO OUTPUTS	<ul style="list-style-type: none"> 2 Auxiliary Outputs (XLR connectors) 1 USB Stereo 4 Headphone Outputs (jack 6,35mm) 8 chan. Dante/AES67 or Ravenna/AES67 (optional) 	OPERATION	<ul style="list-style-type: none"> Dual stereo operation over IP: Program & Talkback lines Bonding or diversity up to 10 links for secure audio streaming with proprietary BRAVE protocol
COMPRESSION ALGORITHMS	<ul style="list-style-type: none"> PCM (16, 20 & 24 bits) Enhanced apt-X OPUS G722 G711 MPEG Layer 2 MPEG AAC LC, LD, HE & ELD (optional). 	ETHERNET	<ul style="list-style-type: none"> 2 Ethernets ports for redundancy or splitting control and stream 10/100/1000 BaseTx Ethernet ports (RJ45 connectors)
AUDIO MIXING	<ul style="list-style-type: none"> In-built channel mixer for both input and output sources Two different mixing matrixes for audio inputs 	Wi-Fi	<ul style="list-style-type: none"> optional Wi-Fi 802.11 b/g/n/ac with external antenna
CONTROL	<ul style="list-style-type: none"> Local control via touchscreen or web browser Remote control of levels and signals via Pro dysControlPlus 	4G/5G	<ul style="list-style-type: none"> 2 options for streaming (optional) <ul style="list-style-type: none"> - Two internal modems (local or worldwide coverage). 4G or 5G optional. - External Communications Module with 4 or 8 modems. 4G or 5G optional. 1 USB for connecting external LTE modems
VIDEO FEATURES (optional)		OPERATIONAL FEATURES	
VIDEO INPUT	<ul style="list-style-type: none"> HDMI or SDI automatic detection, SD Formats: PAL/NTSC. HD Formats: 720p50/59/60, 1080i50/59/60 and 1080p50/59/60. Interlaced formats only supported by HEVC encoding. 	CONTROL	<ul style="list-style-type: none"> User friendly interface via touch panel, built-in Web Server or Pro dysControlPlus application. Configurable user access control Powerful and flexible Presets, Profiles and Alarms 1 general purpose USB
VIDEO OUTPUT	<ul style="list-style-type: none"> HDMI. 	POWER	<ul style="list-style-type: none"> Long life battery (Optional)
COMPRESSION	<ul style="list-style-type: none"> AVC/H.264 or HEVC/H.265 video decoder and /or encoder. Simultaneous encoding and decoding operation for BRAVE and SRT. 	DIMENSIONS & WEIGHT	<ul style="list-style-type: none"> L x W x H: 280 x 235 x 85 mm Weight: 2,9 Kg
STREAMING PROTOCOLS	<ul style="list-style-type: none"> SRT, BRAVE, MPEG-TS and/or RTP/RTMPS. Streaming forwarding with audio embedding. 		

