

## QUANTUM2 W Portable Audio and Video Codec

Remote Commentary Unit with optional Video encoder/decoder function

### OVERVIEW

This unit includes 3 mic /line inputs and 3 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

- AUDIO INPUTS**
- 3 Mic/Line with 48V phantom power (XLR connectors)
  - 1 AES/EBU (XLR connector)
  - 1 Auxiliary Line (XLR connector)
  - 1 USB Stereo
  - 8 chan. Dante/AES67 or Ravenna/AES67 (optional)

- AUDIO OUTPUTS**
- 2 Auxiliary Outputs (XLR connectors)
  - 1 USB Stereo
  - 3 Headphone Outputs (jack 6,35mm)
  - 8 chan. Dante/AES67 or Ravenna/AES67 (optional)

- COMPRESSION ALGORITHMS**
- PCM (16, 20 & 24 bits)
  - Enhanced apt-X
  - OPUS
  - G722
  - G711
  - MPEG Layer 2
  - MPEG AAC LC, LD, HE & ELD (optional).

- AUDIO MIXING**
- In-built channel mixer for both input and output sources
  - Two different mixing matrixes for audio inputs

- CONTROL**
- Local control via touchscreen or web browser
  - Remote control of levels and signals via ProdisControlPlus

## VIDEO FEATURES (optional)

- VIDEO INPUT**
- 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.

- VIDEO OUTPUT**
- HDMI

- COMPRESSION**
- AVC/H.264 or HEVC/H.265 video decoder and /or encoder.
  - Simultaneous encoding and decoding operation for BRAVE and SRT.

- STREAMING PROTOCOLS**
- SRT, BRAVE, MPEG-TS and/or RTMP/RTMPS.
  - Streaming forwarding with audio embedding.

## COMMUNICATIONS FEATURES

- IP PROTOCOL**
- 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

- OPERATION**
- Dual stereo operation over IP: Program & Talkback lines
  - Bonding or diversity up to 10 links for secure audio streaming with proprietary BRAVE protocol

- ETHERNET**
- 2 Ethernets ports for redundancy or splitting control and stream
  - 10/100/1000 BaseTx Ethernet ports (RJ45 connectors)

- Wi-Fi**
- optional Wi-Fi 802.11 b/g/n/ac with external antenna

- 4G/5G**
- 2 options for streaming (optional)
    - 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

## OPERATIONAL FEATURES

- CONTROL**
- User friendly interface via touch panel, built-in Web Server or ProdisControlPlus application.
  - Configurable user access control
  - Powerful and flexible Presets, Profiles and Alarms
  - 1 general purpose USB

- POWER**
- Long life battery (Optional)

- DIMENSIONS & WEIGHT**
- L x W x H: 210 x 235 x 85 mm
  - Weight: 2,5 Kg

