

## QUANTUM2 AV & QUANTUM2 Lite AV

Studio IP Audio & Video codecs. Double stereo audio with video encoder/decoder function.

### OVERVIEW

Quantum2 AV and Quantum2 Lite AV are IP stereo audio codecs, in 19" x 1U form-factor for Quantum2 AV, or half-rack U form-factor for Quantum2 Lite AV, with **video support** for studio/MCR or OB vehicle.



The units are built around two bidirectional stereo audio codecs and a bidirectional video codec. The audio communications can follow either BRAVE, SIP or RTP protocols. Video streaming protocols available are BRAVE, SRT, RTMP / RTMPS and MPEG-TS. Video encoders supported in both units are HEVC and H.264.

Double Ethernet is provided for wide area network connections for Q2 AV units. Bonded LTE/5G support (optional together with HG2 product) is provided for Q2 Lite AV units. Administration or supervision is supported via HTML5 browsers, front LEDs, API, SNMP, Control Touch Panel (optional) or ProdysControlPlus (optional).

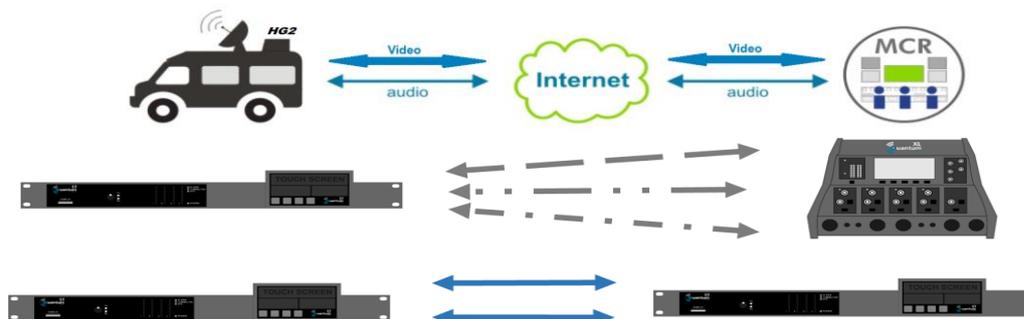
### APPLICATIONS

Quantum2 AV and Quantum2 Lite AV can be seen as Prodys' All-in-one solutions (Audio and Video codecs) for studio and MCR applications, but also for OB VAN applications.

Quantum2 Lite AV with its HG2 accessory, enables outside broadcasting vehicles with two full bidirectional stereo links and one video bidirectional link over multiple LTE/5G access points.

Moreover, Quantum2 Lite AV unit has the possibility to select between Dante or Ravenna/AES67 audio. Not only for contribution but also for distribution networks, Quantum2 AV and Quantum2 Lite AV provides steady and highly reliable audio links using diversity streams. Point to multipoint distribution is supported (multi-unicast 1:10) or unlimited with multicast protocol.

Compatibility with other brands is achieved with standard protocols like SIP EBU, SIP Diversity and RTP protocols for audio and SRT or MPEG-TS protocols for video.



# SPECIFICATIONS

Specifications and designs are subject to change without notice.

## AUDIO FEATURES

- AUDIO INPUTS/OUTPUTS**
- 2 st AES/EBU XLR (Q2 AV)
  - 2 st AES67/Dante/Ravenna RJ45 (Q2 Lite AV)
  - 1 st USB Audio
  - Audio file playback (optional)
  - 96 KHz/ 24 bits AD/DA converters

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

## VIDEO FEATURES

- VIDEO INPUTS**
- 1 SDI input according to SMPTE 292M (HD-SDI) and 424M (3G-SDI).
  - 1 HDMI input

- VIDEO OUTPUTS**
- 1 SDI output & 1 HDMI output, both simultaneous

- COMPRESSION ALGORITHMS**
- AVC (H.264) and HEVC (H.265) encoding and/or decoding
  - Simultaneous Encoding and Decoding in BRAVE and in SRT

- STREAMING PROTOCOLS**
- SRT, BRAVE, RTMP/RTMPS or MPEG-TS.
  - Streaming Forwarding Functionality.

## PHYSICAL SPECS

- DIMENSIONS & WEIGHT**
- Q2 AV: H x W x D: 1U x 19" x 180 mm; 2.4 kg
  - Q2 Lite AV: H x W x D: ½U x 19" x 212 mm; 1kg

## COMMUNICATION FEATURES

- STREAMING**
- Two independent stereo channels
  - BRAVE Diversity or Bonded protocol
  - SIP EBU NACIP 3326 & 3368 and RTP
  - SIP Diversity 2x2 with two IP interfaces
  - BRAVE Diversity 2x2 with two IP interfaces
  - Profiles & Automatic Jitter Buffer adaptation
  - Independent Full Duplex TX and RX operation
  - FEC (Forward Error Correction) and Active Packet Recovery to recover from packet losses
  - Point to Multipoint audio operation (Multi-Unicast)
  - Multicast operation
  - Auxiliary Serial Data

- ETHERNET**
- 10/100/1000 BaseTx Ethernet (2x RJ45 connectors)
  - VLAN (optional)

- Redundancies**
- Double /Diversity streaming interfaces
  - Redundant power supplies (optional for Q2 AV)
  - Redundant AoIP RJ45 interfaces (Q2 Lite AV)

- LTE support (Only Q2 Lite AV)**
- HG2 module (4x LTE/5G)
  - Shielded 5m extender cable for car roof (for HG2)

## MANAGEMENT FEATURES

- CONTROL**
- Local control via web browser
  - Detachable Touch Panel (optional)
  - ProdisControlPlus (optional)
  - Ethernet port for independent control
  - Configurable user access
  - Record of config settings in computer or USB device
  - API /SDK control interface
  - SNMP monitoring /TRAPS
  - Record of streaming performances for analysis
  - WEBMONITOR: remote audio listening

Rear view of Quantum2 AV unit:



Rear view of Quantum2 Lite AV unit:

