QUANTUM2 ST & QUANTUM2 ST DUO
19" IP Audiocodec. Single or Double Stereo

OVERVIEW

Quantum2 ST and Quantum2 ST DUO are IP stereo codecs in 19" x 1U form-factor for studio or OB vehicle. A wide range of audio inputs and outputs are accepted: AES/EBU, analogue, USB audio, Dante or AES67 Ravenna (optional).

Double Ethernet and bonded LTE/5G support (optional together with HG2 product) are provided for wide area network connections.

Administration or supervision is supported via HTML5 browsers, front LEDs, API, SNMP, Control Touch Panel (optional) or ProdysControlPlus (optional). WEBMONITOR is also available to listen to the unit's audio remotely.
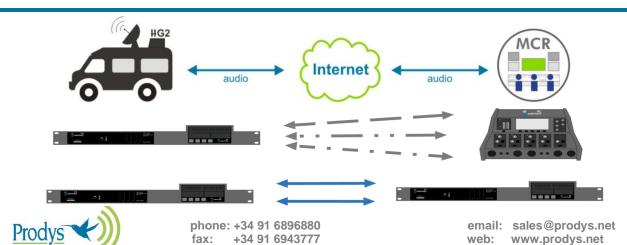
APPLICATIONS

Quantum2 ST (*1x stereo*) or Quantum2 ST DUO (*2x stereos*) are common at Master Control Rooms for any purpose. Often those products are also used as mate codec for outside broadcast equipment of any brand.

Quantum2 ST LTE and Quantum2 ST DUO LTE with their HG2 accessory enables outside broadcasting vehicles with two full bidirectional stereo /mono links over multiple LTE/5G access points.

For Quantum2 ST DUO unit there is the possibility of adding Dante or Ravenna/AES67 audio (optional). Not only for contribution but also for distribution networks, Quantum2 ST or Quantum2 ST DUO 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.

BRAVE Diversity and multi-network bonded protocol. Compatibility with other brands is achieved with standard protocols like SIP EBU, SIP Diversity and RTP protocols.

SPECIFICATIONS

Specifications and designs are subject to change without notice.

AUDIO FEATURES

AUDIO INPUTS/ OUTPUTS
- 1 st AES/EBU XLR (Q2ST & Q2ST DUO)
- 1 st analogue line level XLR (Q2ST & Q2ST DUO)
- 1 or 2 st DANTE redundant RJ45 (optional)
- 1 or 2 st AES67 /Ravenna RJ45 (optional)
- 2 st AES/EBU DB9 (Option for Q2ST DUO AoIP)
- 2 st analogue line level DB15 (Option for Q2ST DUO AoIP)
- 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).

CONTROL
- Local control via web browser
- Detachable Touch Panel (optional)
- ProdysControlPlus (optional)
- Ethernet port for independent control
- Configurable user access
- Record of configuration settings in computer or USB device
- API /SDK control interface
- SNMP monitoring /TRAPS
- Record of streaming performances for analysis
- 7x GPI & 7x GPO contacts
- WEBMONITOR: remote audio listening

COMMUICATION FEATURES

STREAMING
- Two independent mono (Q2ST) or stereo (Q2ST DUO) 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 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)
- Redundant AoIP RJ45 interfaces (optional)

LTE support
- HG2 module (4x LTE/5G access) (optional)
- Shielded 5m extender cable for car roof (optional)

PHYSICAL SPECS

DIMENSIONS & WEIGHT
- H x W x D: 1U x 19" x 180 mm
- Weight: 2.4 kg

Rear view of Quantum2 ST and Quantum2 ST DUO units:

Rear view of Quantum2 ST DUO AoIP unit. Analogue and digital inputs/outputs are optional: