



IP Audio Codec Family with 2 stereo channels

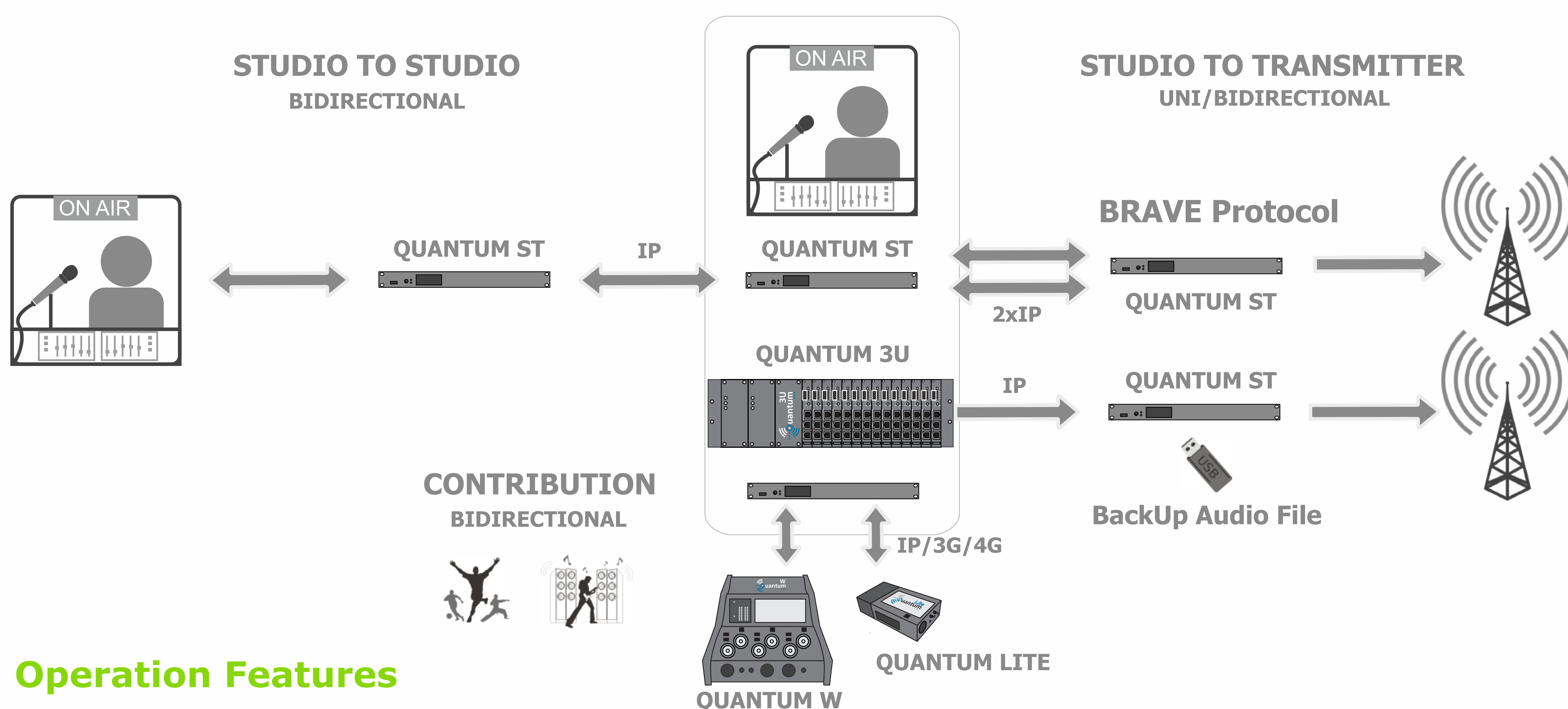
Quantum ST is a powerful new-generation 1U rackmount IP audio codec that inherits world-class IP technology from Prodys's **Ikusnet** video codec family and **Prontonet** audio codec family.

Quantum ST is an audio codec with a wide range of compression algorithms: PCM, G711, G722, MPEG Layer II, apt-X, OPUS and optionally MPEG AAC LC/LD/HE & ELD.

There are two different models:

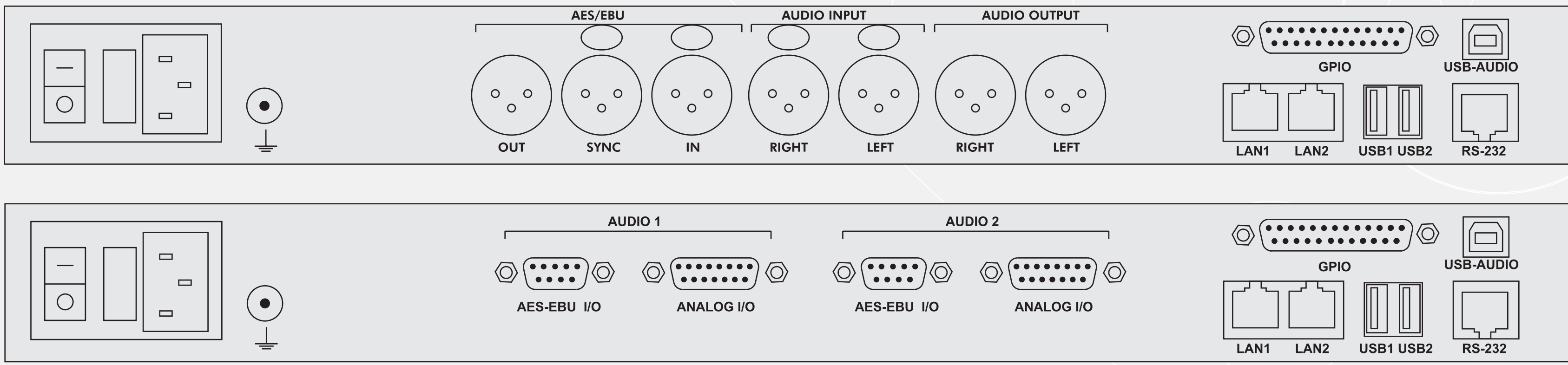
- ✓ **Single Stereo:** with one stereo and XLR connectors for analog and digital inputs/outputs.
- ✓ **Dual Stereo:** with two independent stereo channels and subD connectors.

Quantum ST fully supports IP (TCP and UDP). This enables remote monitoring/configuring and data/audio transportation over data communication links (LAN, WAN, 3G/4G, BGAN, Internet...).



Operation Features

- ✓ **BRAVE:** highly resilient streaming protocol for contribution and distribution.
- ✓ **SIP and SIP Diversity:** Interoperation among different brands according to N/ACIP EBU3326/3368
- ✓ **ProntoNet family compatible**, with SIP and V4 protocol (optional).
- ✓ **2 x Ethernet interfaces**, either to split streaming and control or to provide 2 bonded or redundant IP links.
- ✓ **User friendly operation** with web browser, **ProdysControlPlus** application, SDK interface or optional touch panel
- ✓ **Dante/AES67 or Ravenna/AES67:** Optional interface for uncompressed digital audio.
- ✓ **User Access Control** to define different access restrictions in a per user basis.
- ✓ **Configuration presets** to define different configurations for all or some specific parameters.
- ✓ **Alarms:** Real Time alarms management through **SNMP traps**, **GPO** and **e-mails**.
- ✓ AC power supply with an **option for a AC or DC redundant power supply**.



Quantum ST Single Stereo

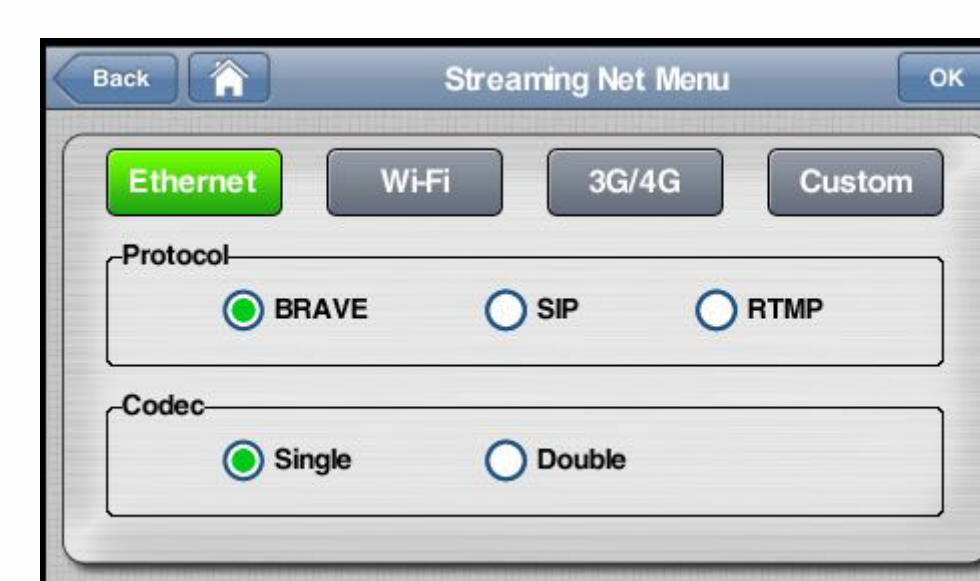
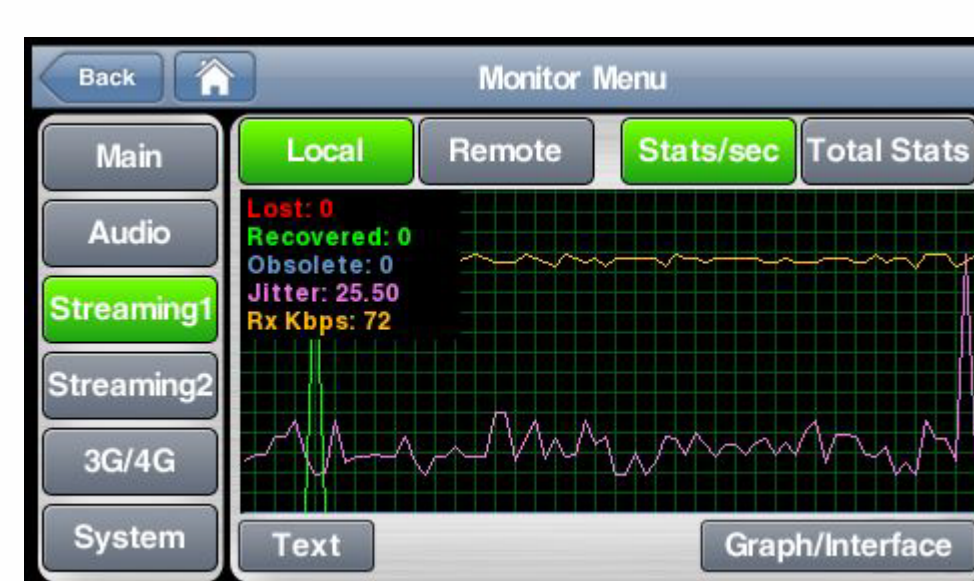
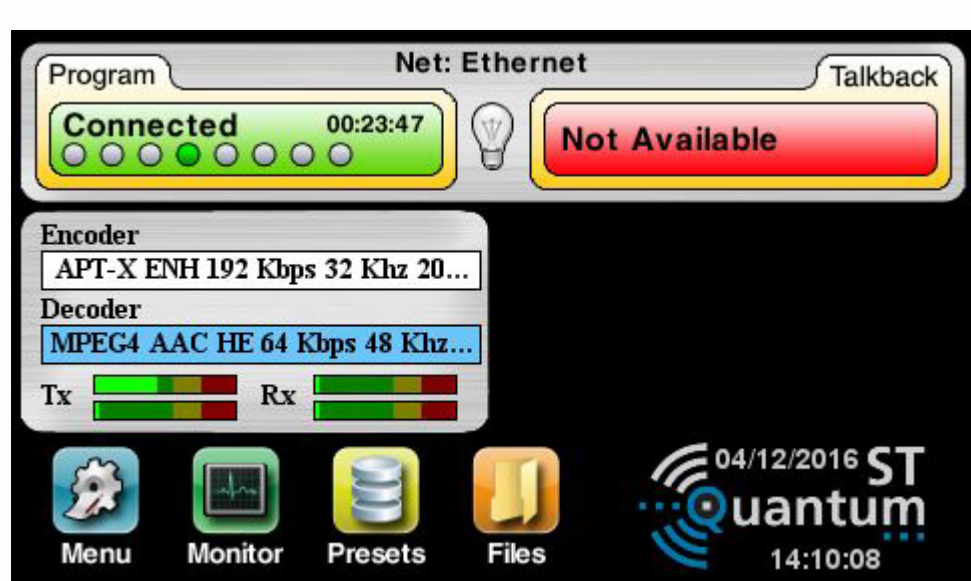
Quantum ST Dual Stereo

Audio Features

- ✓ Analog and Digital Stereo Audio in a single unit
- ✓ **Analog Audio**
 - 24 bits A/D and D/A converters.
 - XLR (Single Stereo) or sub-D (Dual Stereo) connectors
- ✓ **Digital Audio**
 - AES/EBU. Up to 24 bits. Automatic rate adaptation.
 - External clock input.
 - XLR (Single Stereo) or sub-D (Dual Stereo) connectors
- ✓ **Audio Compression Algorithms**
 - OPUS
 - G722, G711 A/μ Law
 - MPEG 1,2 Layer II
 - Enhanced and Standard apt-X™
 - PCM (16, 20 & 24 bits)
 - MPEG AAC LC, LD, HE & ELD (Optional)
- ✓ **Dante/AES67 or Ravenna/AES67** (Optional)

Communications Features:

- ✓ **Dual operation over IP** : Program and Talkback lines, mono or stereo
- ✓ **IP**
 - 10/100/1000BaseTx Ethernet ports, RJ45 connectors.
 - 2 Ethernet ports for bonding, diversity or splitting control and stream.
 - Full **TCP/UDP/IP** connectivity.
 - **IP Multicast, Unicast & Multi-Unicast** audio streaming transmission/reception.
 - **IP Compatibility**: ProntoNet v4 (option) and SIP protocol (N/ACIP EBU Tech 3326 & 3368)
 - Prodys **NAT Traversal** Streaming Protocol permits router firewall pass-through.
 - **FEC** (Forward Error Correction) and **Active Packet Recovery** to recover lost packets.
 - **Automatic Jitter buffer** to avoid audio dropouts, compensating for up to 20 seconds.
- ✓ **Wi-Fi** (optional)
 - **Wi-Fi** interface 802.11 b/g/n compatible.
 - Available for **bonding or diversity** with Ethernet and/or 3G/4G.
- ✓ **3G/4G** (optional): Streaming over 3G/4G networks via **External Communication Module**.
- ✓ **ISDN** (optional): ISDN terminal adaptor with S/T and U interfaces.
- ✓ **Auxiliary data**: Auxiliary data on RS232 port from 300 to 115200 bps.
- ✓ **GPIO**: 7 inputs/outputs. User configurable. Remote contact closures.
- ✓ **File** reception and automatic forwarding to an FTP server.
- ✓ **BackUp Audio File**: Fail-over solution that switches audio output to playlist from a USB stick.
- ✓ **Local or remotely (TCP/IP) upgrading** of one or several units at once using the same utility. Factory software upgrades can be downloaded free.



Last generation
Audio Codec over IP

Width	Height	Depth	Chassis
19"	43.4 mm	295 mm	1U