

# Portable IP Audio Codec + Commentary Unit + Video Decoder



Quantum XL

## Quantum XL portable audio codec

**Quantum XL** is a powerful commentary unit that includes all the technical resources necessary for a successful audio contribution.

**Quantum XL** can act as a standard commentary unit, sending its audio inputs to on-site infrastructure like OB-Vans or IBCs using audio-over-IP **Dante**, **Ravenna** or **AES67** protocols.

**Quantum XL** is also a double stereo codec with an audio mixer capable of transmitting two audio programs directly to studio using IP networks (up to 4 mono channels).

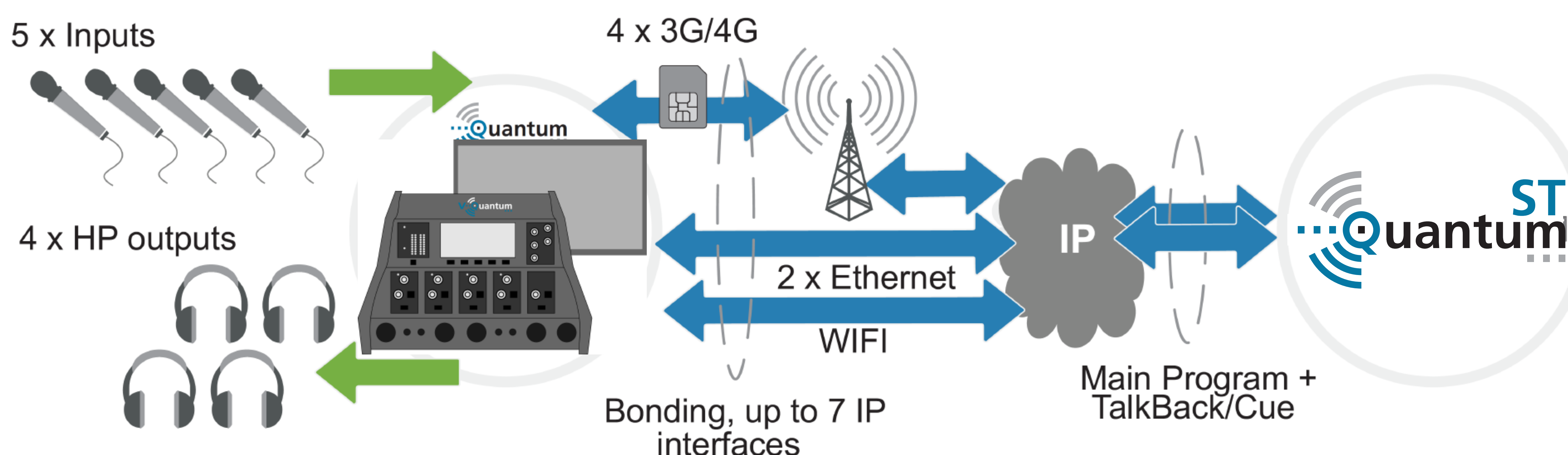
**Quantum XL** includes as an option an **H.264 video decoder** over IP, so video information can be sent from the studio to the field commentators. An **H.264 video encoder** for com-cams is also available.

**Quantum XL** codec inherits world-class IP technology from the Prodys Ikusnet Video Codec Family: Automatic Jitter Buffer, Adaptive Bit rate, **Bonding of up to 7 IP links** (Ethernet, 3G/4G, Wi-Fi) for secure audio streaming with the best possible audio quality.

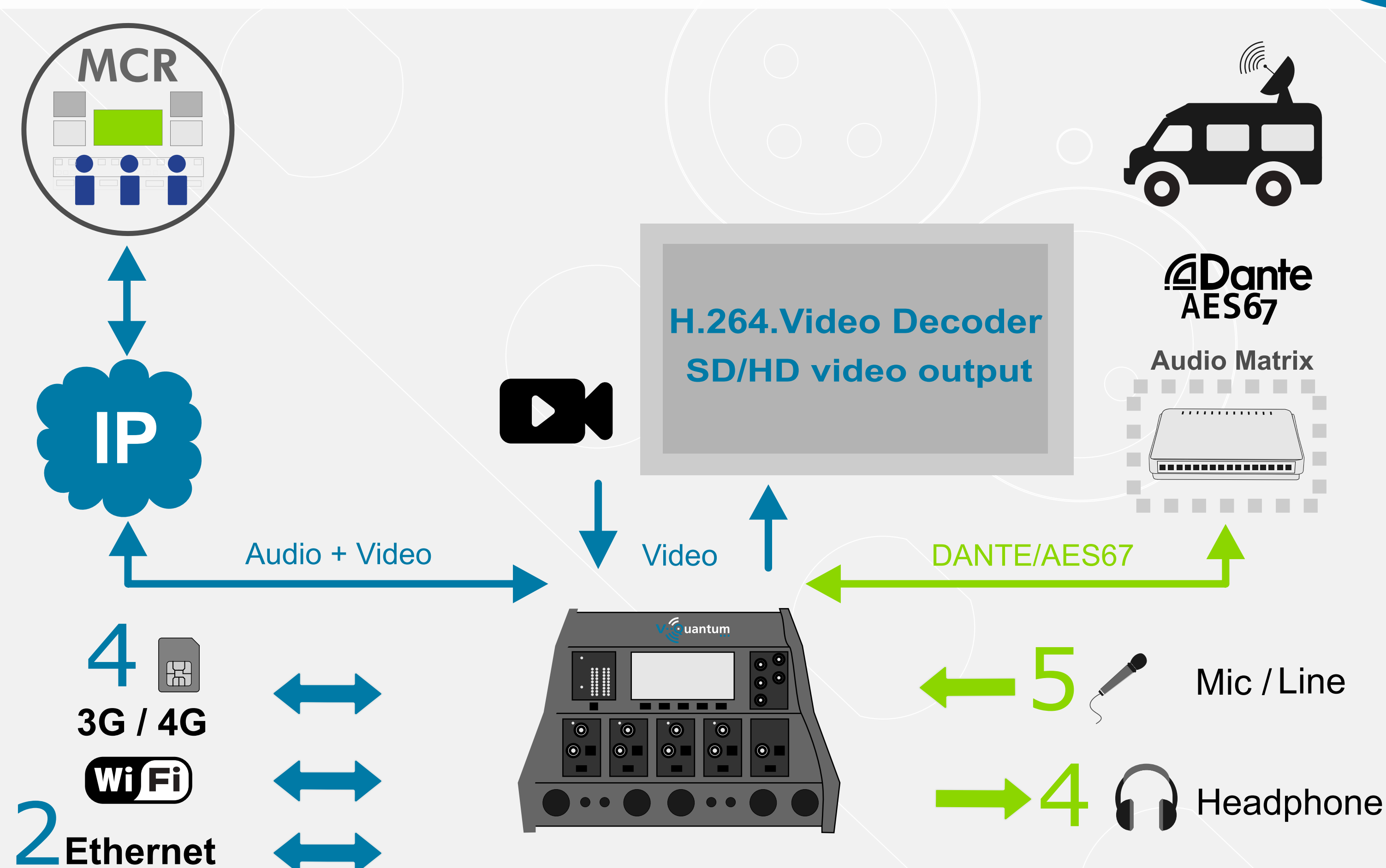
A **Wireless Communication Module** is available with up to four 3G/4G data links with bonding capabilities. This module is external for better reception and versatile installation options.

### Operation Features

- ✓ **BRAVE**: highly resilient streaming protocol for contribution and distribution.
- ✓ **User friendly interface via touch panel**, built-in Web Server or **ProdysControlPlus** application.
- ✓ **Bonding of up to 7 IP links** (1xWi-Fi, 2xEthernet, 4x3G/4G) for secure audio streaming.
- ✓ **2 x Ethernet** interfaces: Either to split streaming and control or for bonding 2 IP links.
- ✓ **2 x internal or 4 x external 3G/4G** data links with **bonding** capabilities.
- ✓ **Widest range of audio compression algorithms**: OPUS, G711/G722, MPEG 1/2 Layer II, MPEG4 AAC LC/HE/ELD, Standard and Enhanced apt-X, Linear PCM 16/24bits.
- ✓ **Alarms**: Real Time alarms management through **SNMP traps** and **GPO**.
- ✓ **Portability**: Long duration battery.
- ✓ **Usability**: Configurable User access control, powerful and flexible Presets, Alarms, Profiles.
- ✓ **Dante/Ravenna/AES67** support when the unit works in Commentary Unit mode.
- ✓ **H264 video decoder** allowing the reception of a video IP stream (MPEG-TS and BRAVE protocols).
- ✓ **H264 video encoder** for transmission via IP of commentator camera.
- ✓ **ProntoNet Family compatible** with SIP and V4 protocol (optional).







## Audio Features

- ✓ Inbuilt **channel mixer** for both input and output sources.
- ✓ All Mic Lines include 48V **phantom power**.
- ✓ XLR connectors in inputs (5 x Mic/Line + 1 x AES/EBU) inputs and 2 x Aux Outputs.
- ✓ 4 x 6,35 mm jack connectors in Headphone Outputs.
- ✓ Local or Remote control of levels and signals (I/O matrix).
- ✓ 1 x USB Stereo Audio Input/output interface
- ✓ **Dante/AES67** or **Ravenna/AES67** optional. RJ45 and SFP socket.
- ✓ **Audio Compression Algorithms:** OPUS; G711 A/μ Law; G722; MPEG 1,2 Layer II; MPEG AAC LC, LD, HE & ELD (optional); Enhanced apt-X™; PCM (16,20 & 24 bits)

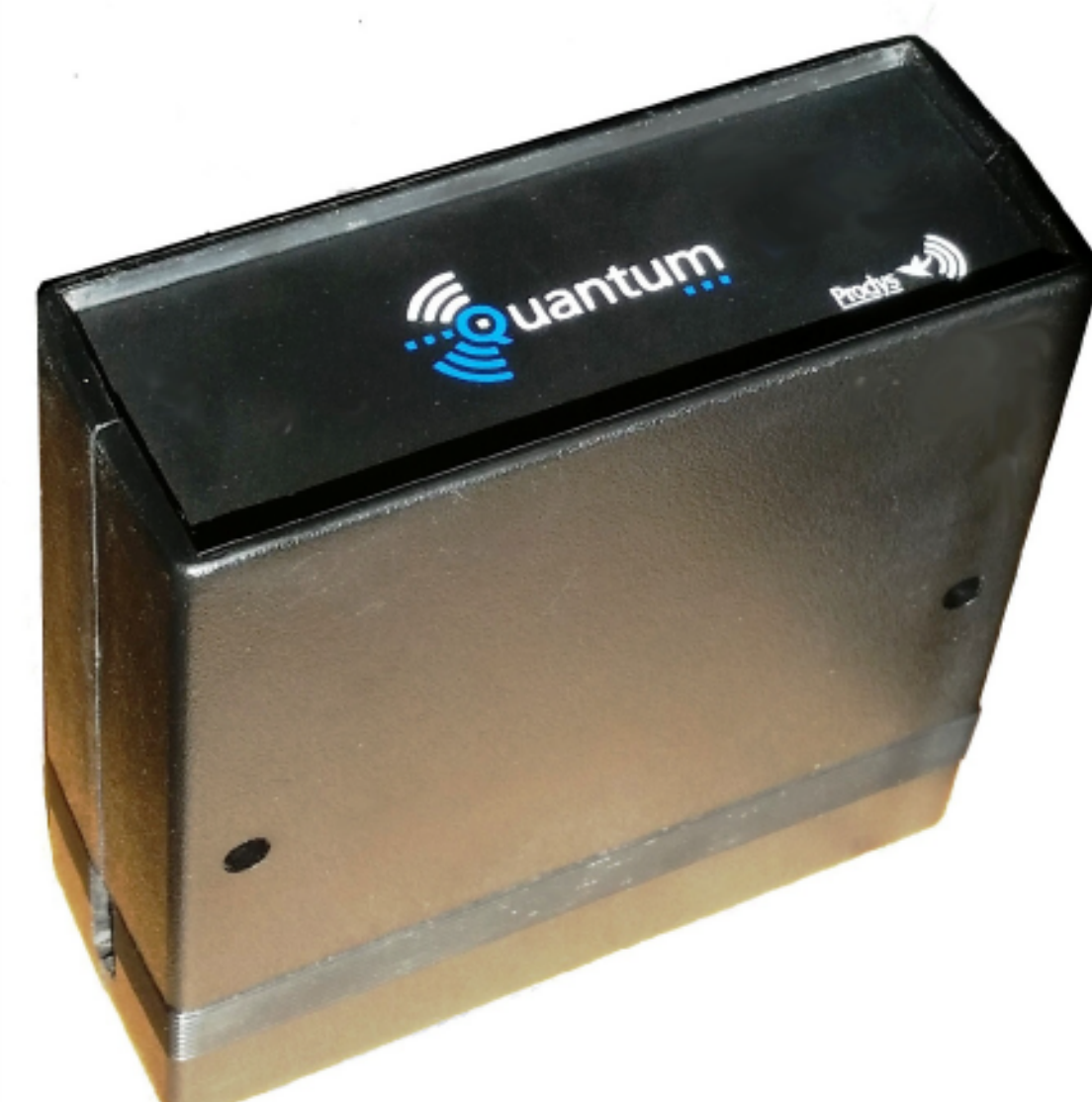
## Video Features (optional)

- ✓ **H264 Video Decoder and Encoder.**
- ✓ DVI Output connector.
- ✓ **MPEG-TS** and **BRAVE** trasmission protocols



## Communications Features in codec mode: IP, Wi-Fi and 3G/4G

- ✓ **Dual stereo operation over IP:** Program and Talkback lines.
- ✓ **IP**
  - 2 Ethernet ports for bonding or splitting control and stream.
  - 10/100/1000BaseTx Ethernet ports, 2xRJ45 connectors.
  - Fully **TCP/UDP/IP** connectivity.
  - **IP Unicast, Multicast and Multi-Unicast** audio streaming transmission/reception.
  - **IP Compatibility:** SIP/SDP/RTP/STUN according to **N/ACIP EBU Tech 3326 & 3368**.
  - **SIP Diversity** with two IP interfaces.
  - **FEC** (Forward Error Correction) and **Active Packet Recovery** to recover from packet losses.
  - Available for **Bonding or Diversity** with Wi-Fi and/or 3G/4G
  - **Automatic Jitter buffer** to avoid audio dropouts.
- ✓ **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 with **2 options:**
    - **2 internal modems.**
    - **External Communications Module** with up to 4 3G/4G SIM cards.
- ✓ **ISDN** (optional)



External Communications Module

## Dimensions

Quantum XL	Width	Height	Depth	Weight
	270 mm	85 mm	235 mm	2.3 Kg

# Portable IP Audio Codec + Commentary Unit + Video Decoder