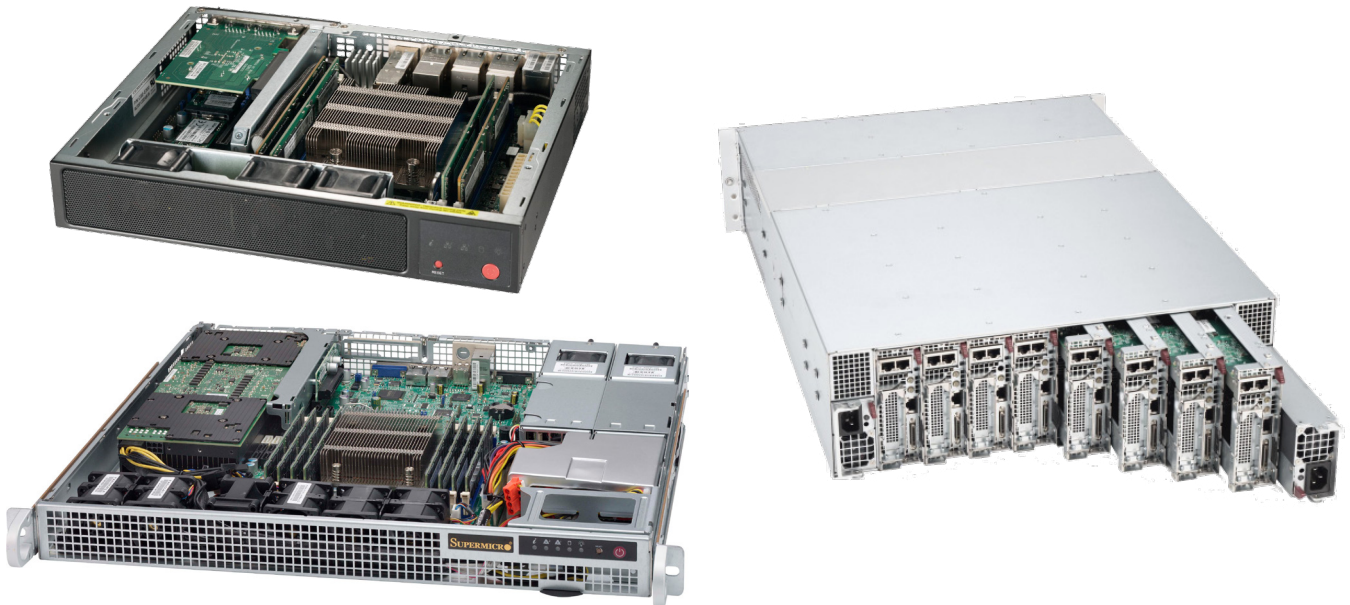# OPEN
BROADCAST SYSTEMS

C200 - CONTRIBUTION APP

Examples of C-200 chassis, other options available

Premium contribution app

The OBE C-200 app allows premium contribution over IP networks over a wide range of bitrates (1-300Mbps) with support for 10-bit 4:2:2 encoding whilst remaining cost-effective, standards compliant and having an ultra-low latency.

Encoding a wide range of contribution services globally, OBE is proven to deliver high quality and low-latency. It is powered by the award-winning x264 encoder with a significantly lower overall cost compared to competitors. The C-200 incorporates uncompressed-over-IP inputs/outputs making it a future-proof encoding/decoding platform.

Available as pure software for IT-centric deployments or as appliances for more traditional setups. There are no restrictions on the encoder chassis, allowing customers to decide on encoder density and power usage.

Multiple feeds can be encoded on a single server, including blade servers, allowing for very high-density encoding. Based on minimum CPU requirements, servers can be bought from existing suppliers or purchased from OBE recommended suppliers.

A modern web interface allowing easy management of the encoder whilst at the same providing SNMP access for integration with existing network management systems.

Integration and support services make sure customers can maximise the benefits of the C-200 platform and deliver the best service to end-users.

TECHNICAL SPECIFICATIONS

ENCODING

- MPEG-4/AVC High/High422 Intra up to Level 4.1 (10-bit) up to 150Mbps
- Low latency - 30-80ms encode latency
- CBR and constrained VBR

INPUT

- SD/HD/3G SDI with format detection
- Uncompressed IP (SMPTE 2022-6/7 and SMPTE 2110)
- Bars and tone with editable text on signal-loss

VIDEO

- 1080i @ 25, 29.97Hz
- 1080p @ 23.98, 24, 25, 29.97, 30, 50, 59.94, 60Hz
- 720p @ 50Hz, 59.94Hz, 60Hz
- 576i @ 25Hz (PAL), 480i @ 29.97Hz (NTSC)

AUDIO (UP TO 8 STEREO PAIRS)

- MPEG-1 Layer II audio
- AAC-LC (HE-AAC is too high latency)
- SMPTE 302M
- Opus
- AC-3 Passthrough

ANCILLARY DATA

- CEA-608/CEA-708 captioning
- Teletext (VBI/OP-47/SMPTE-2031)
- Timecode passthrough
- SCTE 104 (from SDI or TCP) to SCTE 35 conversion
- SMPTE 2038 Ancillary Data

MULTIPLEXING

- MPEG Transport Stream with full DVB and T-STD compliance

OUTPUT

- UDP/RTP (including 2022-7 seamless switching)
- SMPTE 2022-1 FEC
- SRT (Caller/Listener)
- RIST ARQ
- DVB-ASI (using onboard IP to ASI conversion)

DECODING

- MPEG-4/AVC High/High422 up to Level 4.2 (10-bit)

INPUT

- UDP/RTP (including 2022-7 seamless switching)
- SMPTE 2022-1 FEC
- SRT (Caller/Listener)
- RIST ARQ

VIDEO

- 1080i @ 25, 29.97Hz
- 1080p @ 23.98, 24, 25, 29.97, 30, 50, 59.94, 60Hz
- 720p @ 50Hz, 59.94Hz, 60Hz
- 576i @ 25Hz (PAL), 480i @ 29.97Hz (NTSC)

AUDIO (UP TO 8 STEREO PAIRS)

- MPEG-1 Layer II
- AAC-LC
- SMPTE 302M (including data realignment)
- Opus
- AC-3 Passthrough

ANCILLARY DATA

- CEA-608/CEA-708 captioning
- Teletext (VBI/OP-47/SMPTE-2031) and overlay
- Timecode passthrough
- SCTE 35 to SCTE 104 conversion
- SMPTE 2038 Ancillary Data

OUTPUT

- SD/HD/3G SDI
- Uncompressed IP (SMPTE 2022-6/7 and SMPTE 2110)

MANAGEMENT

- Modern, easy to use web interface
- SNMP management with provided MIB
- NMOS IS-04/05/09 Control
- Syslog

OTHER

- Zixi integration
- VideoFlow integration
- Ubuntu Linux packages