



C100 - CONTRIBUTION APP



Examples of C-100 chassis, other options available

Flexible contribution app

The OBE C-100 app provides a cost-effective choice for delivering low-latency contribution services over IP networks with no distinction between encoder and decoder, reducing the required hardware.

Encoding a wide range of contribution services globally and powered by the award-winning x264 encoder, OBE is proven to deliver both high quality and low-latency with a significantly lower overall cost than competitors.

The C-100 app is available as a pure software solution for IT-centric deployments or as appliances for more traditional setups. Multiple feeds can be encoded or decoded on a single server, including blade servers, allowing for very high-density deployments. When purchased as an appliance the C-100's low-depth, rack-mountable chassis allows for easy deployment in vehicles, street-furniture or traditional data-centres.

As a software solution there are very few hardware or chassis requirements, allowing customers to select their own hardware from existing or recommended suppliers. This allows for a highly individualised power usage and server density to be targeted.

The C-100 app is the first broadcast encoder to support the Opus codec, allowing for the combination of very low bitrate audio and low-latency concurrently, something not possible with legacy codecs.

With a modern web interface management of the encoder is easy whilst still providing SNMP access for integration with existing network management systems.

Integration and support services ensure that customers can maximise the benefits of the C-100 app and deliver the best service to end-users.





TECHNICAL SPECIFICATIONS

ENCODING

- MPEG-4/AVC High/High422 (8-bit) up to 50Mbps
- 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

ANCILLARY DATA

- CEA-608/CEA-708 closed captioning
- Timecode passthrough

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 (8-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
- Opus
- AC-3 Passthrough

ANCILLARY DATA

- CEA-608/CEA-708 closed captioning
- Teletext overlay
- Timecode passthrough

OUTPUT

- SD/HD/3G SDI

MANAGEMENT

- Modern, easy to use web interface
- SNMP management with provided MIB
- Syslog

OTHER

- Zixi integration
- VideoFlow integration
- Ubuntu Linux packages

