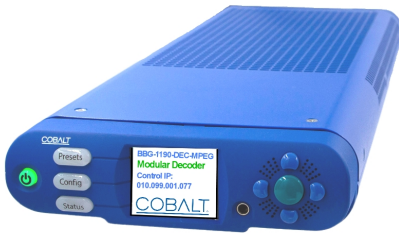# COBALT

BBG-1190-DEC-MPEG • Standalone MPEG4 AVC and MPEG2 Decoder with ASI and IP Inputs and SDI Outputs

The Cobalt® **BBG-1190-DEC-MPEG Standalone MPEG4 AVC and MPEG2 Decoder** with ASI and IP Inputs and SDI Outputs provides a high performance real-time MPEG-2 and MPEG-4 SD and HD video decoding solution. Its design is practically future proof and decodes traditional video formats such as UDP and RTP (MPEG Transport Stream) as well as Internet and Mobile formats such as RTMP (Adobe® Flash) and HLS (Apple® HTTP Live Streaming).

The BBG-1190-DEC-MPEG supports newer cameras that output RTMP and security cameras that output RTSP. Its low power design saves on operating expenses. IP and DVB-ASI input streams are supported, with outputs as ASI, DVB-ASI, SDI, HDMI, and CVBS (for SD streams) using MPEG4 AVC or MPEG2 decoding. The BBG-1190-DEC-MPEG can decode from several audio codecs and provides Dolby® pass-thru. SMPTE-2038 processing allows de-embedding SMPTE-2038 generic ancillary data packets. Low-profile packaging fits 1 RU installations. Full user DashBoard™ remote control allows full status and control access locally or across a standard Ethernet network. A complete SNMP MIB is also included.

FEATURES

Comprehensive MPEG decoding solution – MPEG4 AVC and MPEG2 to ASI, SDI, HDMI and CVBS with built-in audio codecs. Convenience IP output also.

IP reception of unicast or multicast

DVB-ASI Turnaround to IP and ASI with SPTS Splitting

Supports RTMP and RTSP sources

MPEG-1 Layer II, AAC -LC, AAC-HE, E-AC-3 and AC-3 audio codecs standard (Dolby pass-thru; Dolby decode option available)
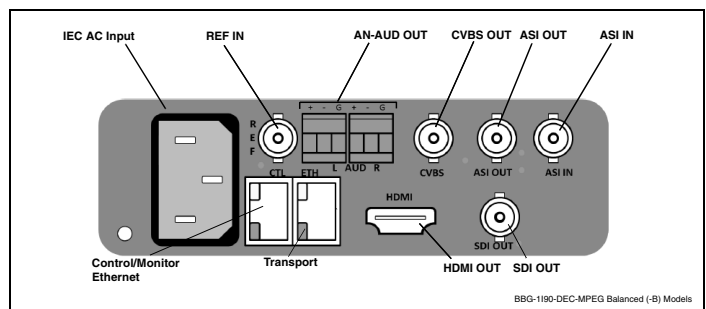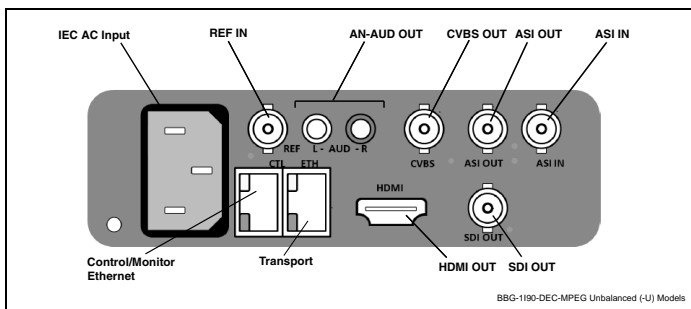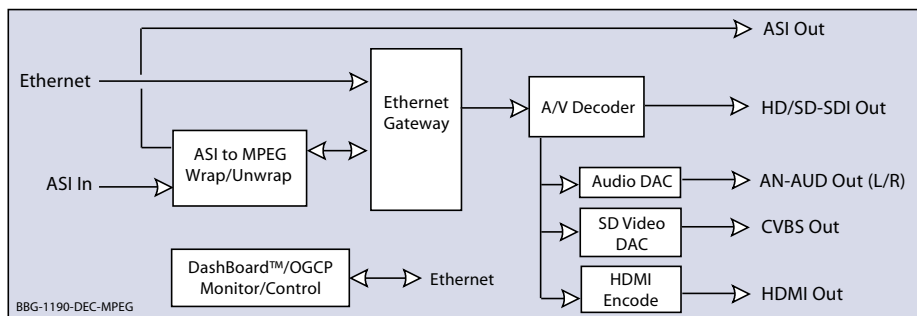
SMPTE-2038 processing allows de-embedding of SMPTE-2038 generic ancillary data packets

SCTE-35 to SCTE-104 conversion

Support for RTP/ARQ interoperability with **+RTP/ARQ** Cobalt Encoder option. (Decoder **+ARQ** license included standard.)

Support for selecting desired video PID in multi-angle streams.

SNMP MIB included

Low-power/high-density design – less than 14 Watts

Dual-redundant internal power supplies

Remote control/monitoring via Dashboard™ software. Advanced front panel display/user interface allows initial and basic configuration setup without needing connection to external network or remote control.

Five year warranty

OPTIONS

Dolby® Decode License (**+DEC-DDEC**) – Allows Dolby audio to be decoded as SDI embedded PCM audio or analog audio output

SMPTE 2022 Forward Error Correction License (**+FEC-DEC**)

IP In License (**+IP-IN**) - Enables IP Port and IP Protocols for IP-to-SDI conversion

Automatic Repeat Request, Error Correction Assigned For Live Video Over IP / Internet Based on the Reliable Internet Streaming Transport (RIST) Standard (**+RIST/ARQ-DEC**)

Genlock License (**+GENLOCK**)

RTMP Server License Option (**+DEC-RTMP-SVR**)

IP License (**+IP**)

Monitoring License (**+TSMON**) – Adds continuous monitoring of current transport stream being decoded. Provides a list of all PIDs available in the transport stream, their current individual bit rates, and keeps numerical track of any continuity counter errors. Can also be configured to watch up to 8 PIDs and issue an alarm if PID disappears for a configurable amount of time. (If SNMP is available, this alarm is also provided as a trap.)

RTMP Server License (**+DEC-RTMP-SVR**)

SRT Support (per unit) License (**+SRT-DEC**)

RIST Encryption/Authentication Support (per unit). (Requires the +RIST/ARQ-DEC license to also be present on the decoder.) (**+RIST/ENCRP-DEC**)

ASI-to-IP conversion option (**+IP-OUT**)

Mounting Tray (holds up to three BBG-1100 series units) (**BBG-1100-TRAY**)

BBG-1190-DEC-MPEG

BBG-1190-DEC-MPEG Unbalanced (-U) Models

BBG-1190-DEC-MPEG Balanced (-B) Models

SPECIFICATIONS

Power
100-250 VAC, 47-63 Hz, 8 Watts max.

Inputs
(1) DVB-ASI 75Ω BNC
(1) IP; 1000Base-T RJ-45

Outputs
(1) HD/SD-SDI 75Ω BNC (4:2:2 10-bit)
(1) CVBS 75Ω BNC
(1) DVB-ASI 75Ω BNC
(1) HDMI
(2) Analog Audio Out L/R (balanced 3-pin terminals or unbal RCA depending on model)

Network Transport Protocols
UDP (Unicast or Multicast)
RTP (Unicast or Multicast)
RTMP Client or Server (Adobe Flash)
RTSP (Security Camera)
SMPTE 2022 Pro-MPEG-FEC
ARQ
HTTP Live Streaming (HLS) client

Video Resolution
3G:
1920 x 1080p – 50/59.94/60
HD:
1920 x 1080i - 50/59.94/60
720 x 1280p - 50/59.94
SD:
480 x 720 - 29.97
576 x 720 - 25

Video Codec Supported
MPEG-2
H.264 4:2:0 High Profile

Audio Codec Supported/Processing
MPEG-1 Layer 2 (mp2)
AAC-LC
HE-AAC
AC-3, E-AC-3 (Dolby® pass-thru)

Regulatory Compliance
CE: CE marked in accordance with 89/336/EEC, 72/23/EEC and 1999/5/EEC Directive
UL: UL approval
US FCC: Part 15
EMC: EN55022, EN55024, EN6100-3-2
Safety: IEC60950
RoHS: 2011/65/EU
WEEE: 2012/19/EU

Physical
Dimensions (WxDxH): 5.8 x 14 x 1.7 in (14.6 x 35.6 x 4.4 cm) (including component projection)
Operating Temperature/Humidity: 32°F to 122°F (0°C to 50°C); 5% to 95% non-condensing

ORDERING INFORMATION

BBG-1190-DEC-MPEG Standalone MPEG4 AVC and MPEG2 Decoder with ASI and IP Inputs and SDI Outputs, available in the following rear-panel I/O configurations:
BBG-1190-DEC-MPEG-B Balanced analog audio outputs
BBG-1190-DEC-MPEG-U Unbalanced (RCA) analog audio outputs

+DEC-DDEC Dolby® Decode License Option

+FEC-DEC SMPTE 2022 Forward Error Correction License Option

+GENLOCK Genlock License Option

+DEC-RTMP-SVR RTMP Server License Option

+IP-IN IP In License Option

+IP-OUT SPTS Stream Splitting License Option

+SRT-DEC SRT Support License Option

+TSMON Monitoring License Option

+DEC-RTMP-SVR RTMP Server License Option

+RIST/ARQ-DEC Automatic Repeat Request License, Error Correction Assigned For Live Video Over IP / Internet Based on the Reliable Internet Streaming Transport (RIST) Standard

+RIST/ENCRP-DEC RIST Encryption/Authentication Support (per unit). (Requires the +RIST/ARQ-DEC license to also be present on the decoder.)

BBG-1100-TRAY 1 RU Rack Mount Tray (supports up to 3 BBG-1100 series units)