COBALT

BBG-SFP-SXH • 3G/HD/SD-SDI / ASI Reconfigurable Video SFP Transceiver
with Externally-Accessible SFP Module

The Blue Box **BBG-SFP-SXH** 3G/HD/SD-SDI / ASI Reconfigurable Video SFP Transceiver with Externally-Accessible SFP Module throw-down converter unit is a part of the Blue Box Group™ of compact, rugged, and portable converter boxes.

The unprecedented flexibility of user-accessible, externally-mounted SFP modules on a throwdown unit makes BBG-SFP-SXH easily configurable as transceiver/converter between coaxial and fiber interfaces. The external SFP cage (along with numerous SFP choices) makes BBG-SFP-SXH virutally obsolescence-proof. BBG-SFP-SXH also features a 3G/HD/SD-SDI selectable input or output with SDI reclock copy and can convert SDI to HDMI. A convenience stereo analog audio de-embed output is also provided.

BBG-SFP-SXH can be configured using the device DIP switches or by using the intuitive BBGConfig GUI application that communicates with BBG-SFP-SXH over a PC's USB port. The GUI app allows dynamic configuration control, status display (including optical receive power where applicable), and other advanced control functions not commonly found on "throwdown" packages. When configured using the GUI app, the USB connection can be removed with all settings held in non-volatile device memory.

FEATURES

Utmost in flexibility with external SFP cage. Configure to numerous media and format types with a simple SFP change using industry-standard Embrionix™ SFPs.

Direct conversion to HDMI from SMPTE 259M, 292M and 424M SDI

Powers directly from host equipment USB or standard corded power adapter. USB power and corded adapter can be simultaneously used to provide redundant power sourcing.
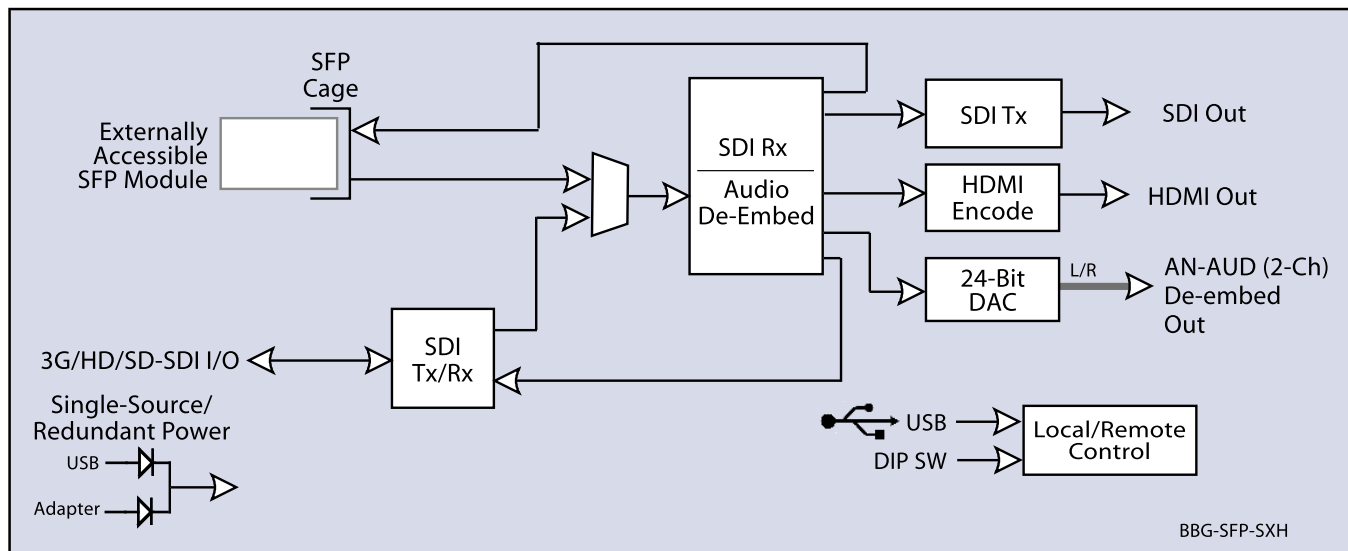
Configurable using device DIP switches or USB GUI remote control offering dynamic configuration control, status display, and other advanced control functions not commonly found on "throwdown" packages

Wide range of available state-of-the-art Embrionix™ SFPs supported, offering fiber and coaxial options

Compact size and low weight design easily affixes directly to camera or host device chassis

Convenient 2-channel analog audio output

Rugged construction backed with a five-year warranty

SPECIFICATIONS

Standards Supported (SDI)
SMPTE 259M, 292M, 424M

Inputs/Outputs
(1) Bidirectional SFP external cage connector (supports Embrionix Video SFPs; see Ordering Info)
(1) Bidirectional SDI / ASI BNC connector (mode user selectable)
(1) SDI reclocked output
(1) HDMI output (HDMI 1.4a compliant). HDMI output can be set as DVI-D (limited to SMPTE HD formats).
(1) Stereo analog audio out (L/R unbalanced pair via 3.5mm TRS jack)

Fiber Tx/Rx Specifications
Tx Wavelength (SPF EO, EOOE): 1310 nm
Tx Power (SFP EO, EOOE): -5.0 dBm (min)
Rx Sensitivity (SFP OE, EOOE): -23 dBm
Rx Wavelength Range (SFP OE, EOOE): 1260 to 1620 nm

Audio Conversion Format
48 kHz sampling, 24-bit
8-Ch HDMI to SDI groups 1 and 2

Power Source
Power-sourced directly from host equipment USB port. Converter can also be powered using corded AC adapter (included)

Power
5-16 VDC, 5W
DC Power Connectors
USB Mini and coaxial locking connector (for use with supplied Cobalt power adapter)

USB Port
Mini-USB (used for power source, USB remote control connection, and firmware upgrade upload to device)

Dimensions (WxHxD)
5.5" x 3" x 1" (including connector projections)
(139 x 77 x 26 mm)

Operating Temperature Range
32°F to 122°F
(0°C to 50°C)

ORDERING INFORMATION

BBG-SFP-SXH   3G/HD/SD-SDI / ASI Reconfigurable Video SFP Transceiver with Externally-Accessible SFP Module

Note: Options denoted as "+" are software-based options which can be uploaded on new product when ordered. The SFP-IP-SWD SFP module is purposed to the types described and specified below using a corresponding factory software upload.

The following SFP modules are available for BBG-SFP-SXH (purchased and available separately):
  -SFP-EO   Single-Channel Video Optical Transmitter (EO); Embrionix™ GO2918
  -SFP-OE   Single-Channel Video Optical Receiver (OE); Embrionix™ GO2917
  -SFP-EOOE   Single-Channel Video Optical Transceiver (EOOE); Embrionix™ GO2929
  -SFP-IP-SWD   Software-Defined EmSFP 2011/2022-6 Encap/De-Encap Host. 10GigE Multi-Mode Optical Interface with Female LC Duplex Connectors. The following I/O purposing software options are available for units using SFP type -SPF-IP-SWD:
    +ADD-SFP-2SDI-TO-IP-2022-6   SFP Software License; Dual-Channel Encapsulator 2SDI-to-IP-2022-6
    +ADD-SFP-2SDI-TO-IP-2110   SFP Software License; Dual-Channel Encapsulator 2SDI-to-IP-2110
    +ADD-SFP-IP-TO-2SDI-2022-6   SFP Software License; Dual-Channel De-Encapsulator IP-2022-6-to-2SDI
    +ADD-SFP-IP-TO-2SDI-2110   SFP Software License; Dual-Channel De-Encapsulator IP-2110-to-2SDI
    +ADD-SFP-IP-TO-SDI-2022-6   SFP Software License; Single-Channel De-Encapsulator IP-2022-6-to-SDI
    +ADD-SFP-IP-TO-SDI-2110   SFP Software License; Single-Channel De-Encapsulator IP-2110-to-SDI
    +ADD-SFP-SDI-TO-IP-2022-6   SFP Software License; Single-Channel Encapsulator SDI-to-IP-2022-6
    +ADD-SFP-SDI-TO-IP-2110   SFP Software License; Single-Channel Encapsulator SDI-to-IP-2110

Note: The USB GUI application available for BBG-SFP-SXH is a free download (Windows Security Certified) that can be downloaded from our Support web page. Instructions for downloading and using the app are included in product documentation. Currently, this application is available only for Windows Vista thru Windows 10.

BBG-MB   Mounting Bracket

Note: Device includes one PS4 Power Supply (AC adapter). Power supplies listed below are for replacement or spares purposes:
· **PS4** Universal Power Supply, UL/CSA. Input: 100-240V, 60/50 Hz. Output: 5 VDC @ 12 Watts
· **PS5** Universal Power Supply, IEC Connector, CE/UL/CSA. Input: 100-240V, 60/50 Hz. Output: 5V, 2A (International Power Supply. Specify country of destination.)