

# SilverBullet2

Mini 12G/6G/3G/HD/SDI Optical Extenders

## **FEATURES**

- Fiber Transport From 5Mbps to 12Gbps
- > 16 CWDM Wavelengths Available
- Supports SMPTE 310M, 259M, 344M, 292M, 424M, 2081-1M, 2082-1 & DVB-ASI
- Equalizes 75m @ 12G, 200m @ 3G, of Gepco VSD2001 or Belden 1694A Cable
- Supports Embedded Audio and Data
- Re-clocking
- Single-mode Fiber Recommended
- > ST Optical Connector
- > Small, Rugged, Portable
- > Stand-Alone or Rack Mounted
- Power Supplies Included
- International AC Adapters
  Included
- ▷ One Year Warranty

## APPLICATIONS

- > Sports Production
- Distance Learning
- ▶ Pre-Fibered Venues
- Courtesy Feeds

## For Fixed Links or Last Minute SDI Feeds



The SilverBullets are an economical solution for transporting multi-rate SDI signals ranging from 5Mbps all the way up to 12Gbps over single mode fiber. At just three inches in length, the SilverBullets are perfect for a wide variety of professional A/V and broadcast applications.

The rugged, diecast powder coated aluminum enclosure supports the popular metallic ST-type optical connector and the SDI video connector is on a standard full size BNC. Power (5-16 VDC) is supplied using an AC Adapter with a locking DC connector that eliminates any possibility of the power cord accidentally becoming unplugged.

Integrated LEDs make troubleshooting easy with DC power and optical laser indications on the transmitter. The receiver has DC power and optical power indicators. Not only can your RX unit receive SDI signals, it can also be used as a confidence optical power meter for ANY digital optical signal.

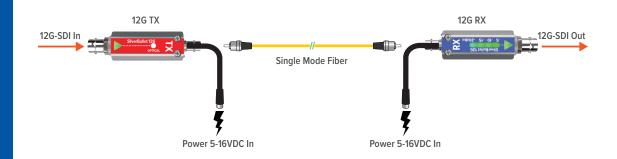
Auto sensing inputs provide robust cable equalization and reclocking on SDI signals. When ASI is detected the reclocking is turned off to allow for transmission of ASI signals.

Although the SilverBullets are small in size, this does not mean they can't handle long links. With an optical launch power of -3dBm for standard units (0 dBm for CWDM units) and receiver sensitivity to -14dBm @ 12G, and -18dBm @ 3G make fiber runs of 25km or more possible with optical power to spare.

SilverBullet transmitters can also be ordered in any of the 16 available CWDM wavelengths in order to facilitate optical multiplexing. Each pair of SilverBullets comes with 100-240VAC input wall-mount power supplies. For instances when you want to power your units from your camera battery, optional D-TAP, or USB-A, USB-C cable adapters are available.

The SilverBullets from MultiDyne. The next time you need just one more feed ten minutes prior to air, you'll be glad you have them.

## **APPLICATION & USAGE**





## SilverBullet2

Mini 12G/6G/3G/HD/SDI **Optical Extenders** 

## **12G TECHNICAL SPECIFICATIONS**

## **Digital Video**

Bit Rate:	5Mbps to 12Gbps
# of Ins/Out:	1 BNC
Impedence	75 Ohms
Level	800mV (peak to peak)
Standard	SMPTE 424M, 292M, 297M, 2082-1, 2081-1
Bit Error Rate	10^-12 @ -14dBm for 12G
Rise/Fall Times	<45ps @ 12G

## Optical

optical		
Wavelengths	16CH CWDM	
Optical Connector	ST	
Optical Source	DFB	
Optical Detector	PIN Diode	
TX Output	-3	
RX Sensitivity	-14 dBm @ 12G	
Link Budget	11 dB (up to 10km)*	
Fiber Type	Singlemode	

<sup>\*</sup> Distances based on using Single-mode fiber

## Mechanical, Environmental

Power	5-16 VDC
Consumption	1 Watts
Operating Temperature	-20 to +45°C (-4 to +113°F)
Storage Temperature	-40 to +70°C (-40 to +158°F)
Humidity	Max. 90% (noncondensing)
Dimensions	3.2 x 0.65 x 0.75 inches
Weight	1.8 oz.

## **Cable Equalization**

@ 1.485 GBPS @ 2.97 GBPS	280m 200m
@ 5.94 GBPS	120m
@11.88 GBPS	75m

## **ORDERING INFORMATION**

12G Module	Power Supplies Included
SB2-12G-RX-ST	SilverBULLET2 Miniature O to E Fiber Receiver with ST Connector. Supports SD-SDI to 12G-SDI, MADI and AES.
SB2-12G-TX-13-ST	SilverBULLET2 Miniature E to O 1310nm Fiber Transmitter with ST Connector. Supports SD-SDI to 12G-SDI, MADI and AES.
SB2-12G-TX-15-ST	SilverBULLET2 Miniature E to O 1550nm Fiber Transmitter with ST Connector. Supports SD-SDI to 12G-SDI, MADI and AES.
SB2-12G-TX-27-ST	SilverBULLET2 Miniature E to O 1270nm CWDM Fiber Transmitter with ST Connector. Supports SD-SDI to 12G-SDI, MADI and AES.
SB2-12G-TX-29-ST	SilverBULLET2 Miniature E to O 1290nm CWDM Fiber Transmitter with ST Connector. Supports SD-SDI to 12G-SDI, MADI and AES.
SB2-12G-TX-31-ST	SilverBULLET2 Miniature E to O 1310nm CWDM Fiber Transmitter with ST Connector. Supports SD-SDI to 12G-SDI, MADI and AES.
SB2-12G-TX-33-ST	SilverBULLET2 Miniature E to O 1330nm CWDM Fiber Transmitter with ST Connector. Supports SD-SDI to 12G-SDI, MADI and AES.
SB2-12G-TX-35-ST	SilverBULLET2 Miniature E to O 1350nm CWDM Fiber Transmitter with ST Connector. Supports SD-SDI to 12G-SDI, MADI and AES.
SB2-12G-TX-37-ST	SilverBULLET2 Miniature E to O 1370nm CWDM Fiber Transmitter with ST Connector. Supports SD-SDI to 12G-SDI, MADI and AES.
SB2-12G-TX-39-ST	SilverBULLET2 Miniature E to O 1390nm CWDM Fiber Transmitter with ST Connector. Supports SD-SDI to 12G-SDI, MADI and AES.
SB2-12G-TX-41-ST	SilverBULLET2 Miniature E to O 1410nm CWDM Fiber Transmitter with ST Connector. Supports SD-SDI to 12G-SDI, MADI and AES.
SB2-12G-TX-43-ST	SilverBULLET2 Miniature E to O 1430nm CWDM Fiber Transmitter with ST Connector. Supports SD-SDI to 12G-SDI, MADI and AES.
SB2-12G-TX-45-ST	SilverBULLET2 Miniature E to O 1450nm CWDM Fiber Transmitter with ST Connector. Supports SD-SDI to 12G-SDI, MADI and AES.
SB2-12G-TX-47-ST	SilverBULLET2 Miniature E to O 1470nm CWDM Fiber Transmitter with ST Connector. Supports SD-SDI to 12G-SDI, MADI and AES.
SB2-12G-TX-49-ST	SilverBULLET2 Miniature E to O 1490nm CWDM Fiber Transmitter with ST Connector. Supports SD-SDI to 12G-SDI, MADI and AES.
SB2-12G-TX-51-ST	SilverBULLET2 Miniature E to O 1510nm CWDM Fiber Transmitter with ST Connector. Supports SD-SDI to 12G-SDI, MADI and AES.
SB2-12G-TX-53-ST	SilverBULLET2 Miniature E to O 1530nm CWDM Fiber Transmitter with ST Connector. Supports SD-SDI to 12G-SDI, MADI and AES.
SB2-12G-TX-55-ST	SilverBULLET2 Miniature E to O 1550nm CWDM Fiber Transmitter with ST Connector. Supports SD-SDI to 12G-SDI, MADI and AES.
SB2-12G-TX-57-ST	SilverBULLET2 Miniature E to O 1570nm CWDM Fiber Transmitter with ST Connector. Supports SD-SDI to 12G-SDI, MADI and AES.

Accessories	
SB2-CASE	Nanuk Blue Plastic Case to hold pair of Silverbullets + Power Supplies
SB2-PS-12V-miniXLR4	Power Supply, 12V, 2A, mini XLR4, SilverBULLET2
CA-5V-miniXLR4-USB-A	miniXLR 4pin Female to USB-A 5V, 2A accessory power cable
CA-5V-miniXLR4-USB-C	miniXLR 4pin Female to USB-C 5V, 2A accessory power cable
CA-miniXLR4-D-Tap	miniXLR 4pin Female to D-TAP 5V, 2A accessory power cable
CA-BNCM-BNCM-6	BNC male to BNC male adapter cable, six inches
CA-BNCM-HDBNCM-6	BNC male to HDBNC male adapter cable, six inches