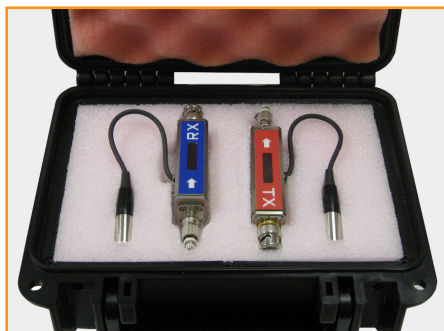


MC² Series 3G-SDI Video BNC-ST Media Converters

MC² Video Media Converter modules extend distance over single-mode fiber for high speed serial digital video links for multi-protocol 3G/HD/SD/DVB/ASI video applications with data transfer rates up to 2.97 Gbps.

MC² Series 3G-SDI Video BNC-ST Media Converters



Media converters and kits with alpha-numeric status display

MC² Video Media Converter modules extend distance over single-mode fiber for high speed serial digital video links for multi-protocol 3G/HD/SD/DVB/ASI video applications with data transfer rates up to 2.97 Gbps.

CAN TRANSMIT THE FOLLOWING SIGNAL TYPES

- **3G-SDI, SMPTE 424M** (2.970 Gbps and 2.970/1.001 Gbps)
- **HD-SDI, SMPTE 292M** (1.485 Gbps and 1.485/1.001 Gbps)
- **SD-SDI, SMPTE 259M** (143 Mbps, 270 Mbps and 360 Mbps)
- **DVB/ASI** (270 Mbps)
- **AES** Audio pair, if on 75 Ohm BNC
- **MADI** (125 Mbps), if on 75 Ohm BNC
- **ATSC/SMPTE 310M** (19.4 Mbps and 38.8 Mbps)

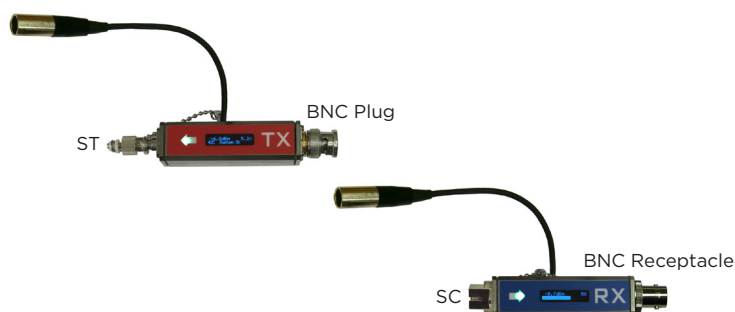
KEY PARAMETERS

- **Operating Input Voltage Range:** +4.5 to 24 VDC
- **TX Power Dissipation:** 1.75 W
- **RX Power Dissipation:** 1.4 W
- **Operating Case Temperature:** 0°C to +70°C

Note: Must input a signal into transmitter to get proper accurate optical output power reading on transmitter status display.

CONNECTOR OPTIONS

- **Models are available with BNC plug or optional receptacle coaxial connector and ST or optional SC physical contact optical connector**



SIGNAL HANDLING

- Up to 3G-SDI high definition digital video
- Error free uncompressed SDI pathological pattern operation
- Transmits embedded audio already embedded in 3G-SDI, HD-SDI or SD-SDI signals
- Line equalizer on TX
- Cable driver on RX

DIAGNOSTICS

- Easy to understand OLED displays simple, real time operating parameters and diagnostics
- Status LED
- Optical power displayed in dBm

COMPLIANCE

- RoHS-6

TE Components . . . TE Technology . . . TE Know-how . . .

AMP | AGASTAT | CII | HARTMAN | KILOVAC | MICRODOT | NANONICS | POLAMCO | Raychem | Rochester | DEUTSCH
SEACON Phoenix | Phoenix Optix | SEACON

Empower Engineers to Solve Problems, Moving the World Forward.

Ordering Information

Transmitter, Power Supplies & Kit Part Numbers	Optical Transmit Power (dBm)			Receiver Part Number		Shipping Dimensions and Weight (each)
				PIN Pre-Amp 1260-1620nm Receiver		
				MC2-R-P-2 (BNC plug, ST optical) MC2-R-P-2-SC (BNC plug, SC optical) MC2-R-P-2-R (BNC receptacle, ST optical) MC2-R-P-2-R-SC (BNC receptacle, SC optical)		
				RX Optical Input Power(dBm)	Link Distance @ 2.97Gbps	
Min	Typ	Max	Min / Max		Min / Typ	

Separate Converters

1310nm Fabry-Perot Laser Transmitter MC2-T-P-2 (BNC plug, ST optical) MC2-T-P-2-SC (BNC plug, SC optical) MC2-T-P-2-R (BNC receptacle, ST optical) MC2-T-P-2-R-SC (BNC receptacle, SC optical)	-9	-5	-3	3G: -18.5 / +0 HD: -20 / +0	10 / 25 km 6 / 15 mi	16.25 x 11.25 x 4.25 inch
DFB CWDM Laser Transmitters MC2-T-P-xx* (BNC plug, ST optical) MC2-T-P-xx-SC (BNC plug, SC optical) MC2-T-P-xx-R (BNC receptacle, ST optical) MC2-T-P-xx-R-SC (BNC receptacle, SC optical) -xx = 2-digit wavelength code.*	0	+1.5	+3		35 / 50 km 22 / 31 mi	41 x 29 x 11 cm 1.1 lb 477 g

Power Supplies (Sold Separately)

International Power Supply with wall plugs for Australia, Europe, UK and US VMDA-PS-5				Input: 100-240 VAC 50/60 Hz Output: 5VDC, 3A, 15W	16.25 x 11.25 x 4.25 inch
Regional Power Supplies PS-5V-3W-MXLR-D (US) PS-5V-3W-MXLR-E (Europe) PS-5V-3W-MXLR-U (UK)				Input: 100-240 VAC 50/60 Hz Output: 5VDC, 0.55A, 3W	41 x 29 x 11 cm 1.3 lb 568 g

KITS: Include 1310nm Fabry-Perot Laser TX, PIN Preamp RX and 2 Power Supplies in Black Plastic Case

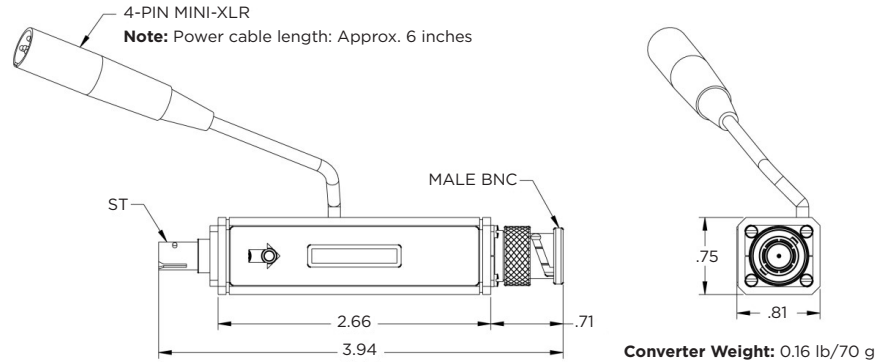
Kits with International Power Supplies MC2-K-P-2 (BNC plugs, ST optical) MC2-K-P-2-SC (BNC plugs, SC optical) MC2-K-P-2-R (BNC receptacles, ST optical) MC2-K-P-2-R-SC (BNC receptacles, SC optical)				3G: -18.5 / +0 HD: -20 / +0	10 / 25 km 6 / 15 mi	16.25 x 11.25 x 4.25 Inch 41 x 29 x 11 cm 3.1 lb 1.4 kg
Kits with Regional Power Supplies MC2-K-P-2-D (BNC plugs, ST optical, US) MC2-K-P-2-SC-D (BNC plugs, SC optical, US) MC2-K-P-2-R-D (BNC receptacles, ST optical, US) MC2-K-P-2-R-SC-D (BNC receptacles, SC optical, US)	-9	-5	-3			
MC2-K-P-2-E (BNC plugs, ST optical, Europe) MC2-K-P-2-SC-E (BNC plugs, SC optical, Europe) MC2-K-P-2-R-E (BNC receptacles, ST optical, Europe) MC2-K-P-2-R-SC-E (BNC receptacles, SC optical, Europe)						
MC2-K-P-2-U (BNC plugs, ST optical, UK) MC2-K-P-2-SC-U (BNC plugs, SC optical, UK) MC2-K-P-2-R-U (BNC receptacles, ST optical, UK) MC2-K-P-2-R-SC-U (BNC receptacles, SC optical, UK)						

***NOTE:** xx = 2-digit wavelength code. 27=1270, 31=1310, 33=1330, 35 =1350, 37=1370, 39=1390, 41=1410, 43=1430, 45=1450, 47=1470, 49=1490, 51=1510, 53=1530, 55=1550, 57=1570, 59=1590 and 61=1610nm.

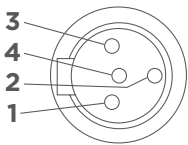
Chart Abbreviations: Max = Maximum, Min = Minimum, Typ = Typical.
Contact TE for DFB and CWDM laser transmitter availability.

MC² Series 3G-SDI Video BNC-ST Media Converters

Mechanical Dimensions (Inches)

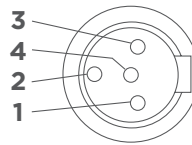


Power Connector Pin Layouts



Media Converter

1. PIN 1 = GND / BLACK WIRE
2. PIN 2 = SDA / YELLOW WIRE
3. PIN 3 = SCL / WHITE WIRE
4. PIN 4 = Vcc / RED WIRE



Power Supply

1. PIN 1 = NEGATIVE
2. PIN 2 = NOT USED
3. PIN 3 = NOT USED
4. PIN 4 = POSITIVE

Status Indicator Lights

TX LED Indicator	
Status	Condition
Green	Normal Operation
Red	Transmit Fault
Blinking Red	DDMI Alarm
Blinking Orange	DDMI Warning

RX LED Indicator	
Status	Condition
Green	Normal Operation
Red	Optical Input Signal Out of Range
Blinking Red	DDMI Alarm
Blinking Orange	DDMI Warning

MC² OLED Display DDMI Diagnostics, Alarms and Warnings

TX Display	
Diagnostic	Alarms & Warnings
Optical Output Power (dBm)*	Low or High Optical Power
Temperature (°C)	Low or High Temperature
Voltage (VDC)	Low or High Voltage
-	Low or High Transmitter Bias

RX Display	
Diagnostic	Alarms & Warnings
Optical Output Power (dBm)	Low or High Optical Power
Temperature (°C)	Low or High Temperature
Voltage (VDC)	Low or High Voltage

***NOTE:** Must input a signal into transmitter to get proper accurate optical output power reading on transmitter status display.

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Consult TE for the latest dimensions and design specifications.

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