

# microwave photonic systems

MP-17X100TDC: Optical EDFA with Integrated Tunable Dispersion Compensator

## Optical Amplifier With Tunable Dispersion Compensation Module



**Provides linear optical amplification and tunable dispersion compensation for long haul photonic transport.**

The MP-17X100TDC integrates the functionality of an Erbium Doped Fiber Amplifier (EDFA) and a Tunable Dispersion Compensator Module (TDCM) to provide long haul transmission of RF communications traffic using C-Band optical signals.

When the MP-17X100TDC is used in conjunction with selected MPS optical transmitters which are configured with DWDM lasers it is capable of providing transmission distances up to 130 km.

The key attributes of the MP-17X100TDC which allow the extended transmission of RF signals are the linear optical gain (23 dB), and the tunable window of dispersion slope compensation (+/- 1500 ps/nm). The MP-17X100TDC is optimized for RF optical communications link with a RF bandwidth of up to 18 GHz.

The MP-17X100TDC System Consists of a 1RU rack mount unit, with digital front panel display and controls. The integrated Ethernet based Monitor and Control (M&C) permits remote operation and status monitoring of the unit.

Information: Call us toll-free at 888-868-8967 or email [info@b2bphotonics.com](mailto:info@b2bphotonics.com)

### Market Applications

- Ultra Wideband RF over Fiber
- Long Haul Interfacility Links
- Remote Telemetry Links
- Mil-SATCOM Earth Stations

### Features & Options

- Ultra Wideband (1MHz to 18 GHz)
- Optional Extension to Ka-Band (33 GHz)
- Linear Gain of 23 dB
- Slope Compensation of 1500 ps/nm
- Front Panel Control Display
- Remote Status Monitor and Control
- 3 Year Full Warranty

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# Optical Amplifier With Tunable Dispersion Compensator

## Specifications

### Optical Performance Parameters:

Operating Wavelength	C-Band
Optical Connector	FC/APC ( Or Customer Specified)
Input Optical Power	-23 dBm to 0 dBm
Optical Gain	up to 23 dB
Noise Figure	5.5 dB (Min) to 8 dB (Max)
Dispersion Correction	+/- 1500 ps/nm

### System Interface Parameters:

Remote Monitor and Control	Ethernet via RJ45
Local Monitor and Control	Front Panel Key Pad and Vacuum Fluorescent Display

### General Performance Parameters:

Power Supply	Auto Ranging, Universal AC
Power Control	On/Off Switch
Storage Temperature	-40°C to +75°C
Operating Temperature	-20°C to +60°C
Dimensions	19" x 1RU Standard

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