

MAXNET® II

Platinum Series

RF & Optical Signal Management

Patented
U.S.# 7,142,414



Active Products

3RU Active Chassis
(front view)

1550nm Narrowcast QAM Forward Path Optical Transmitter:

1550nm Narrowcast QAM Forward Path:

- ▶ Patented forward path optical transmitters (FPTs) with integrated RF 8-way narrowcast combining technology optimize rack space efficiency
- ▶ Install up to 12 transmitters into one MAXNET® II 3RU chassis (assuming remote powering)
- ▶ Optimized RF isolation in both the narrowcast-broadcast (>40 dB) & narrowcast-narrowcast (>30 dB) inputs eliminates network isolation concerns
- ▶ Ultra low narrowcast signal level input requirements eliminates the requirement for any amplification in the narrowcast lash up
- ▶ High performance MCX connector RF inputs
- ▶ Front access RF test point
- ▶ Front LEDs indicate transmitter module power & status
- ▶ AGC or MGC modes of operation (AGC mode utilizes continuous RF attenuation)
- ▶ Front access to AGC/MGC control, transmitter mute, NC attenuator, & RF attenuator (MGC mode)
- ▶ Voltage, current, temperature, fan status, RF power, optical power, RF and optical power threshold, RF attenuator level (MGC), transmitter mute, are easily monitored & controlled over the network (HMS compliant (SNMP v2c)) or through a web browser; e-mail alarm notification is also supported
- ▶ Transmitter module takes up 2 slots in MAXNET® II chassis (total of 24 slots)



MPTX8Q40-9

RF & Optical Signal Management

1550nm Narrowcast QAM Forward Path Optical Transmitter:

1550nm Narrowcast QAM Forward Path Transmitter Specifications

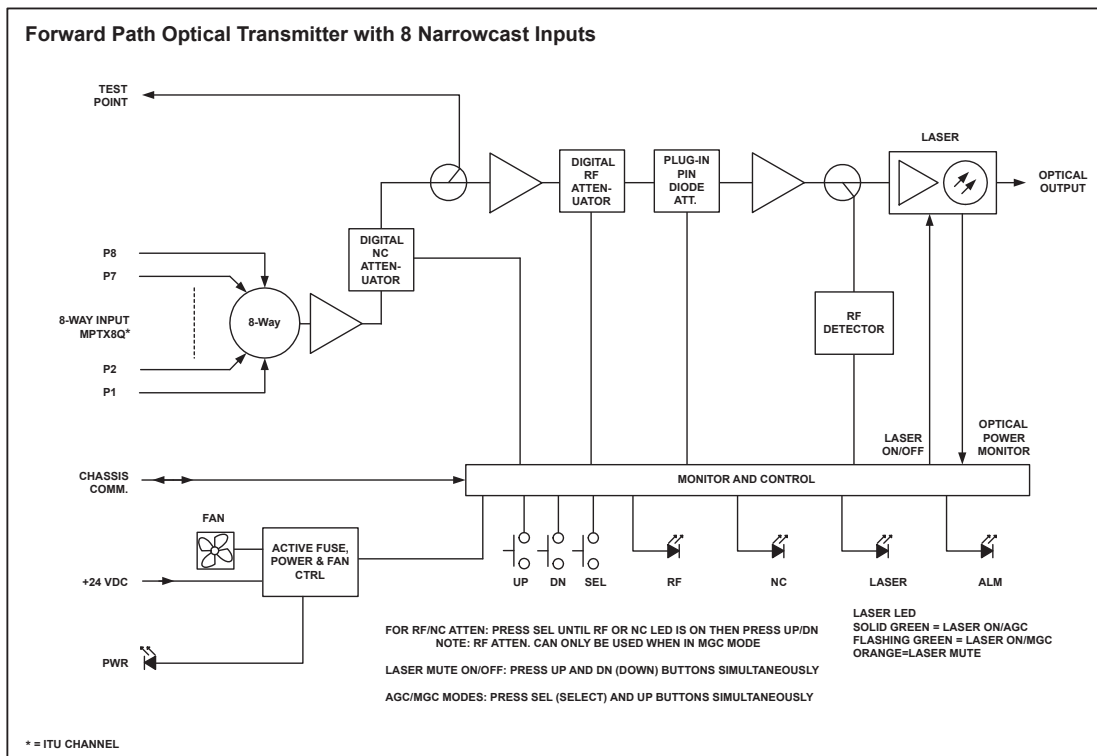
RF & OPTICAL SPECIFICATIONS		
WAVELENGTH	Any ITU CH 20-59	
WAVELENGTH ACCURACY	+/- 0.1nm	
OUTPUT POWER	+9 dBm +/- 1 dB	
CONNECTOR TYPE	SC/APC (std.), Others on Special Order	
BANDWIDTH	47 - 1002 MHz	
FLATNESS	50 - 550 MHz	50 - 1000 MHz
	+/- 1.0 dB	+/- 1.75 dB
MIN. NARROWCAST PORT RF INPUT LEVEL ⁽¹⁾	22 dBmV / Channel	
INPUT RETURN LOSS (Min. 50-1000 MHz)	18 dB	
TEST POINT	Front: -20 dB +/- 1.0 dB	
ISOLATION (Min. 50-1000 MHz)	>30 dB	
AUTOMATIC GAIN CONTROL (AGC)	Range: 6 dB	
MANUAL GAIN CONTROL (MGC)	Set and Control: Front Access Pushbutton, HMS SNMP v2c, Web Browser, Range: 15.5 dB Digital Attenuator	
MUTE	Front Access Pushbutton, HMS SNMP v2c, Web Browser	
LINK PERFORMANCE ⁽²⁾	MER	> 40 dB
	BER	< 1 e-9
	C/N	> 50 dB
	AGC RANGE	+22 to +39 dBmV / Channel at Input to 8-way
OTHER		
TRANSMITTER STATUS INDICATION	Front LEDs, HMS SNMP v2c, Web Browser	
INPUT POWER ⁽³⁾	300mA at 24 VDC	
NOTES:		
(1) Input power is BEFORE the 8-way combiner.		
(2) Link performance specified for 10 km fiber, 16 x QAM256 load and RX input of -8 dBm.		
(3) DC current required from 24V chassis bus.		

Ordering Information

Part Number	Description
MPTX8Qxx-9	1550nm Narrowcast QAM Forward Transmitter at DWDM ITU Channel xx, 8 RF Inputs, +9 dBm Output

1550nm Narrowcast QAM Forward Path Optical Transmitter:

Functional Schematic



Replacement Fan:

- ▶ Front access replacement fan

Ordering Information

Part Number	Description
MPFANB	Replacement Fan for MAXNET II Transmitters

