

# Q-SERIES® Optical

## Fiber Optic Products



### QFON Fiber Nodes:

#### Features:

- ▶ 1-way, 1RU fiber node
- ▶ Available in 350, 870 & 1000 MHz with gains up to 48 dBmV output
- ▶ Variable gain & tilt controls
- ▶ Available in GaAs power-doubled output
- ▶ Utilizes external Class II, 120 to 26 VAC, 60 Hz UL power transformer
- ▶ Additional DC powering ports (+24 VDC) provided for applications requiring alternate or backup power
- ▶ UL transformer & +24 VDC powering



#### QFON 350 MHz Version

- ▶ 5-350 MHz version available in push-pull silicon technology
- ▶ Offers RF output levels suitable for a limited number of devices typically used for reverse path signals
- ▶ Unit uses a 20 dB variable output level control
- ▶ Equalization or slope not provided

#### QFON 870 & 1000 MHz Version

- ▶ 54-1000 MHz version available in silicon push-pull, silicon power-doubled, or GaAs power-doubled RF output technology
- ▶ Offers RF output levels up to 48 dBmV
- ▶ A lower gain 24 dBmV output version is available for driving limited number of distribution ports
- ▶ All units have variable gain & slope output RF controls

### QFON Specifications

SPECIFICATIONS	54-1000 MHz	
FREQUENCY RESPONSE	+/- 0.5 dB	
CHANNEL LOADING	77	
GAIN CONTROL RANGE	10 dB	
SLOPE CONTROL RANGE	10 dB	
RF GAIN	n/a	
TECHNOLOGY	Si PP	GP
RF OUTPUT LEVELS <sup>(1)</sup>	20	48
OPTICAL INPUT LEVEL RANGE	-4 to +3 dBm	
COMP. TR. BT. (-dB)	94	82
COMP. 2nd ORD. (-dB)	84	77
CARRIER-TO-NOISE RATIO	53 dB	53 dB
RETURN LOSS (Worst Case)	14 dB	14 dB
DC AMPERES @ 24 VDC	0.22	0.66
POWER DISSIPATION (Watts) <sup>(2)</sup>	9	27
OPERATING TEMPERATURE	0°C to +50°C (+32°F to +122°F)	
HUMIDITY	20%-55% (without condensation)	
DIMENSIONS	1.75"H x 19.0"W x 3.4"D (4.45H x 48.26W x 8.64D cm)	
WEIGHT	7.0 lbs (3.18 kg)	
<b>NOTES:</b> All node specifications are based on 1mW (0 dBm) optical power input with 3.7% OMI per channel. (1) Output levels of 48 are recommended to use a 9 dB sloped output referenced from 54-1000 MHz. (2) Power dissipation is measured at 120 VAC.		

## QFON Fiber Nodes:

### Ordering Information

**Example Part Number: QFON870 A - 48 GP 1W 48**

	1	2	3	4	5	6
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1: Bandwidth: 1000 = 1000 MHz  
870 = 870 MHz  
350 = 350 MHz

2: A = SCAPC (Green)  
F = SCUPC (Blue)  
Other Connectors Available

3: Gain (See Specifications Table)

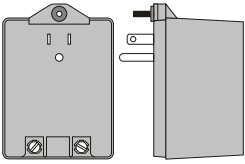
4: Output Technology: PP = Push-Pull  
P = Power-Doubled  
Q = Quadra-Power  
GP = GaAs-Doubled

5: 1-way (1W) only for the QFON

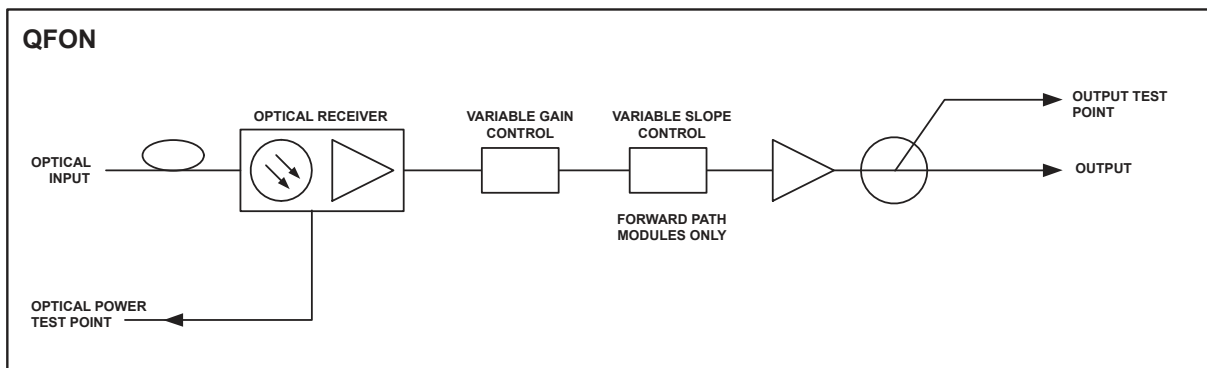
6: 48 = 48 VDC

Part Number	Description
<b>Options &amp; Spares</b>	
#951	120 Volts to 26 Volts, 60 Hz AC Power Transformer, 50 VA Rating

#951 Transformer



### Functional Schematic



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Specifications subject to change without notice.

