



QFN Fiber Node:

Features:

- ▶ Power-doubled GaAs technology
- ▶ 1-way or 2-way models
- ▶ Return laser also available with optional CWDM wavelengths
- ▶ Optional integrated WDM mux can be used in conjunction with the QFRL/DFB15-23 (1550nm 2.5mW laser) in order to facilitate bi-directional communications on a single fiber
- ▶ 10 segment LED power meter located under cover
- ▶ Universal power options
- ▶ 5/8" hardline fitting on select models
- ▶ Choice of fixed or variable controls



QFN Specifications

SPECIFICATIONS	1-WAY	2-WAY				RETURN LASERS				
	QFN GP	QFN GP				1310nm DFB	1550nm DFB	1310nm FP	CWDM	
BANDWIDTH (MHz)	5-870	54-870 or 1000				5-42	5-42	5-42	5-42	
FREQUENCY RESPONSE	± 0.5 dB	± 0.5 dB				± 0.25 dB	± 0.25 dB	± 0.25 dB	± 0.25 dB	
CHANNEL LOADING	77	77				4	4	1	4	
GAIN CONT. RANGE	n/a	Pad				Pad	Pad	Pad	Pad	
SLOPE CONT. RANGE	n/a	EQ				EQ	EQ	EQ	EQ	
GAIN	n/a	n/a				23	23	23	23	
OUTPUT LEVELS	48	40	44	49	51	2mW	2mW	1mW	2mW	
DISTORTIONS	COMP. TR. BT. (-dB)	74	82	74	69	65	n/a	n/a	n/a	n/a
	COMP. 2nd ORD. (-dB)	73	77	73	71	67	> 65 ⁽¹⁾	> 65 ⁽¹⁾	Typ. 49 ⁽¹⁾	> 65 ⁽¹⁾
CARRIER-TO-NOISE RATIO (dB)	53	53	53	53	53	n/a	n/a	n/a	n/a	
RETURN LOSS (Worst Case)	15 dB	15 dB	15 dB	15 dB	15 dB	15 dB	15 dB	15 dB	15 dB	
DC AMPERES @ 24 VDC	0.66	0.66	0.66	0.66	0.66	0.18	0.18	0.18	0.18	
POWER DISSIPATION (Watts) ⁽²⁾	27	27	27	27	27	7	7	7	7	
OPERATING TEMPERATURE	0°C to +50°C (+32°F to +122°F)									
HUMIDITY	20%-55% (without condensation)									
DIMENSIONS	9.13H" x 7.0"W x 3.56"D (23.19H x 17.78W x 9.04D cm)									
WEIGHT	7.5 lbs (3.4 kg)									

NOTES:

All forward node specifications are based on 1mW (0 dBm) optical power input with 3.7% OMI per channel.

(1) Return laser specification is for discrete 2nd order beats, not composite 2nd order.

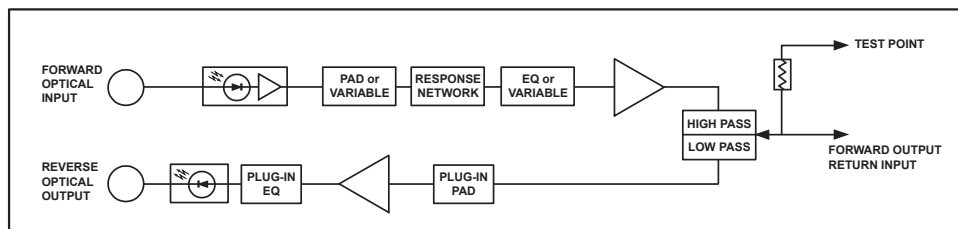
(2) Power dissipation is measured at 120 VAC. Multiple gain models show minimum specifications, call for exact data.

QFN Fiber Node:

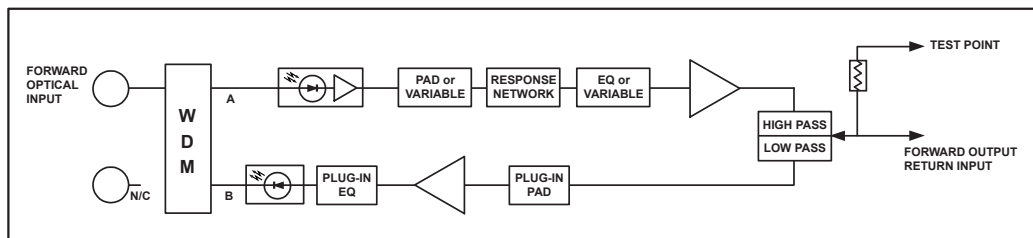
Ordering Information

Example Part Number:	
QFN 870 A -40 GP 2W	
1 2 3 4 5	
1. Frequency Range:	870 = 870 MHz 000 = 1000 MHz
2. Connector Type:	A = SC/APC F = SC/UPC
3. Output Level (See Specifications Table)	
4. Technology:	GP = GaAs Power Doubled
5. 2-way Ready*:	2W *
	1-way: 1W
NOTE: * To activate 2-way functionality, order one of the Return Laser options: QFRL/DFB1-23, QFRL/DFB15-23, QFRL/DFB15-23W, QFRL/FP1-23 or QFRL/xxxx-23.	
Part Number	Description
Options	
QFRL/DFB1-23	1310nm 2mW DFB Return Laser
QFRL/DFB15-23	1550nm 2.5mW DFB Return Laser
QFRL/DFB15-23W	1550nm 2.5mW DFB Return Laser; WDM Module Integrated into Unit
QFRL/FP1-23	1310nm, 1mW Fabry-Perot Return Laser
QFRL/xxxx-23	CWDM, 2mW, DFB. xxxx = 1470, 1490, 1510, 1530, 1570, 1590, 1610
QPML870-**	Interstage EQ Value, Factory Selected for Slope. ** = dB value (1.5, 3.0, 4.0, 4.5, 5.0, 6.0, 7.0, 7.5, 9.0, 10.5, 12.0, 13.5, 15.0, 16.5, 18.0)
QPML1000-**	Interstage EQ Value, Factory Selected for Slope. ** = dB value (1.5, 3.0, 4.0, 5.0, 6.0, 7.0, 8.0, 9.0, 10.0, 11.0, 12.0, 13.5, 15.0, 16.5, 18.0)
QES42-**	Reverse EQ Value. ** = dB value (0-12 dB in 1 dB increments)
SXP-TY-**	Plug-in Attenuator Pads. ** = dB value (0-20 dB in 1 dB increments)
DTS240250UC-P5-ET	External Universal AC Power Supply, 100-240 VAC, 47-63 Hz Input, 24 VDC Output
#951	120 to 26 VAC Transformer, 50 VA

Functional Schematic



QFN with Integrated WDM Functional Schematic



MDU Solutions® is a registered trademark of ATX in the United States and/or other countries. Products or features contained herein may be covered by one or more U.S. or foreign patents. Other non-ATX product and company names mentioned in this data sheet are the property of their respective companies.



Specifications subject to change without notice.

