IFL-DL DiLink Plug-In Modules



Rev. V1

Features

- Flexible Modular System
- Analog RF Bandwidth to 4 GHz
- RF Transport up to 20 km
- High Dynamic Range
- Wide Bandwidth
- Low Noise
- Temperature Compensated
- 1310nm, 1550nm and CWDM Options

Applications

- Signal & Antenna Distribution
- Communications
- Radar
- Testing
- Campus Networking

Description

DiLink Plug-In Modules provide high density, high reliability, interchangeable interfacility communications links for use in our 1RU IFL chassis. Applications include signal and antenna distribution, communications, radar, testing, and campus networking.

These single-wide plug-in modules allow any mix of up to six modules in a single rack, with frequency range options up to 4 GHz. All link modules are hot-swappable for plug-and-play operation.

MACOM offers a wide variety of active and passive plug-in modules, including RF-to-Fiber Optic Transmitters and Receivers, RF Mux and DeMux modules, Fiber Optic CWDM and DWDM modules, RF Low Noise amplifier modules, Erbium Doped Fiber Amplifier (EDFA) modules, and Customized modules configured with any RF and Fiber components required to meet your specific needs.



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Style	Gain	Freq (MHz)	Link Gain (dB) @ centerband	RF Input Com- pression (dBm)	RF Input IP3 (dBm)	Link Noise Figure (dB)	SFDR3 typical (dB/ Hz ^{2/3})
W	0	100 to 1000	0 +/- 2	0	15	30	107
W	0	500 to 2500	0 +/- 2	0	15	30	107
W	0	1000 to 4000	0 +/- 2	0	12	30	105
W	15	100 to 1000	15 +/- 2	-6	10	30	104
W	15	500 to 2500	15 +/- 2	-6	10	30	103
W	15	1000 to 4000	15 +/- 2	-6	6	30	101
N	0	900 to 2250	0 +/- 2	4	17	30	108
Ν	0	2000 to 3400	0 +/- 2	2	12	28	106
N	15	900 to 2250	15 +/- 2	-1	13	30	105
N	15	2000 to 3400	15 +/- 2	-1	8	28	103

Absolute Maximum Ratings

Parameter	Units	Тур.
Storage Temperature	°C	-20 to 85
RF Input Level (TX)	dBm	+10
Optical Input Level (RX)	dBm	+5
Transmitter Power Consumption	W	3
Receiver Power Consumption	W	3.5

All Units

Parameter	Units	Тур.
Gain Variation over Temp.	dB	+/- 1
Gain Flatness Full Band	dB	+/- 1
Gain Flatness over any 250 Mhz	dB	+/- 0.25
RF Connector	SMA Female	
Optical Connector	FC/APC	

¹ Consult factory for wavelength selection options

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Typical Performance Curves

L-Band Link (Gain)



L-Band Link (Input Return Loss)



Ordering Information

I F L - D L m w s f g	Module Type	f Frequency Range
example:	T Transmitter	1 2 to 500 (W style only)
IFL-DLT5W30F	R Receiver	2 100 to 2000 (W style only)
Transmitter		3 500 to 2500 (W style only)
1550 nm	w Wavelength	4 1000 to 4000 (W style only)
Wideband	3 1310	5 2 to 100
500 to 2500 MHz	4 1530	6 100 to 500
0 dB Link Gain	5 1550	7 900 to 2250
	C custom	8 2000 to 3400
		9 3000 to 4000 (W style only)
		C custom
	s Style	g Link Gain
	W Wideband	0 0 dB
	N HDN/LN	1 15 dB
	I HDN/HIP3	C custom

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