FICER Technology Co., Ltd.
明虹科技股份有限公司
2F, No.138, Daye Rd., Beitou Dist.,
Taipei City 11268, Taiwan
www.Ficer.com

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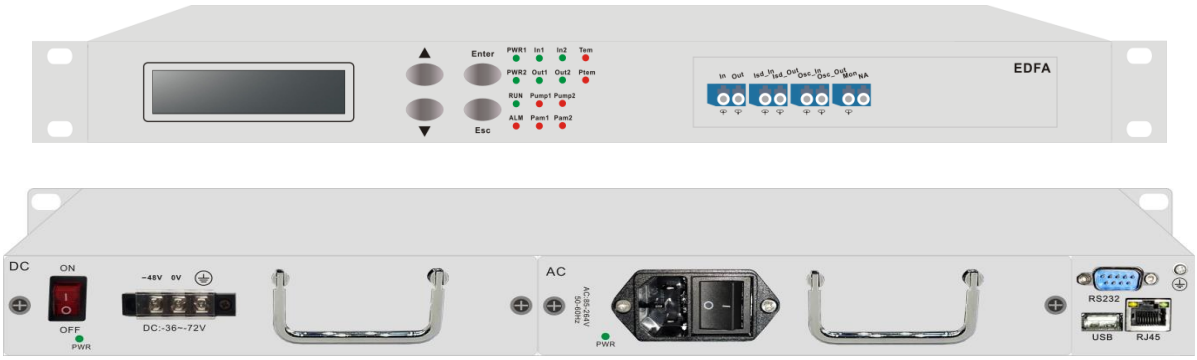
F520 DWDM 1U Rack-Mount EDFA (Erbium-Doped Optical Fiber Amplifier)

Part Number: F520-1U-DxxxxGxxxx-x-xx



Overview

The F520-1U-DxxxxGxxxx-xx series is 1U Rack-Mount EDFA of the F520 optical multi-service transmission platform solution. It amplifies the DWDM C-Band signals up to 48 Channels with 100GHz spacing / 96 Channels with 50GHz spacing and has the features of Flat Gain, Adjustable Gain and Low Noise. It is the essential part in the applications of DWDM, High Speed and Long-Haul optical networks. There are three model options in an extended optical link : Booster, In-Line and Pre-amplifier

Booster amplifier operates at the transmission side of the link. It features high input power, high output power, and medium optical Gain. Boosters are designed to amplify aggregated optical input power for reach extension.

In-Line amplifier operates at the halfway stations of the link. It features low input power, high output power, and high optical Gain. In-Line amplifiers are designed to amplify signals in the middle points between transmitters and receivers.

Pre-Amplifier operates at the receiving end of an optical link. It features medium to low input power, medium output power, and high Gain. Pre-amplifiers are designed for optical amplification to compensate for losses in a demultiplexer located near the optical receiver.

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Applications

- Metro DWDM distance extension
- C-Band DWDM signals amplifying
- CATV network system
- Long-Haul transmission system

Features

- Fixed 1U Rack package, LC optical port
- Low Noise Figure : typical 5dB, MAX 5.5dB
- Multiple operating modes : AGC, APC, ACC
- High performance transient response control to ensure Power, Gain stable without affecting existing signal
- Support customized saturated Output Power up to +22dBm
- Support customized Gain variety range 8 ~ 35dB
- Optional OSC management channel for remote management
- Support Red / Blue port for the single-fiber DWDM transmission system
- Support Mid-Stage access for the insertion of a DCM or OADM unit without its inherent loss
- MON port for on-line monitoring optical power and OSNR
- Support LCD screen with Panel buttons control
- Support SNMP, Web management
- 1+1 Pluggable Redundancy Power supply, AC / DC optional

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Specification

Parameter		Min	Typ	Max	Unit
Operating Wavelength	Standard	1528		1565	nm
	Extended	1528		1567	
Output Power				+22	dBm
Gain		8		35	dB
Gain Flatness			1.0	1.5	dB
Gain Adjustable Range	w/o VOA	± 3			dB
	with VOA	± 5			
Input Power	BA	-22		Max.Output -Gain	dBm
	PA / LA	-32		Max.Output -Gain	
Noise Figure			5.0	5.5	dB
Input threshold		Input Power -1dB			dBm
Polarization Dependence Loss				0.3	dB
Polarization Dependence Gain				0.4	dB
Polarization Mode Dispersion				0.5	ps
Pump Power Leakage				-29	dBm
Return Loss				-45	dB
Power Supply	AC	100 ~ 240			V
	DC	-48			
Power Consumption		≤ 30			W
Size	Fixed 1U	442(W) x 250(D) x 44(H)			mm
Operating Temperature		-10 ~ +60			°C
Storage Temperature		-40 ~ +85			°C
Relative Humidity		5 ~ 95			RH%

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Ordering Information

F520-1U-D□□□□G□□□□-□-□□

Amplifier Type
B- Booster Amplifier
L- In-Line Amplifier
P- Pre-Amplifier

Wavelength Range
A- Standard *default
E- Extended

Max. Total Output Power
16- 16dBm 20- 20dBm
18- 18dBm 22- 22dBm
xx- xxdBm

Power Gain
12- 12dB 30- 30dB
20- 20dB 35- 35dB
25- 25dB
xx- xxdB

VOA
V- with VOA
Blank- without VOA *default

OSC
S- with OSC
Blank- without OSC *default

Bidi Function
B- Pass 1528~1543nm (Ch45~Ch60)
Reflect 1547~1561nm (Ch21~Ch36)
R- Pass 1547~1561nm (Ch21~Ch36)
Reflect 1528~1543nm (Ch45~Ch60)
Blank- Not Bidi

Mid-Stage Insertion Loss
08- 8dB *default if with Mid-Stage
10- 10dB
xx- xxdB
Blank- without