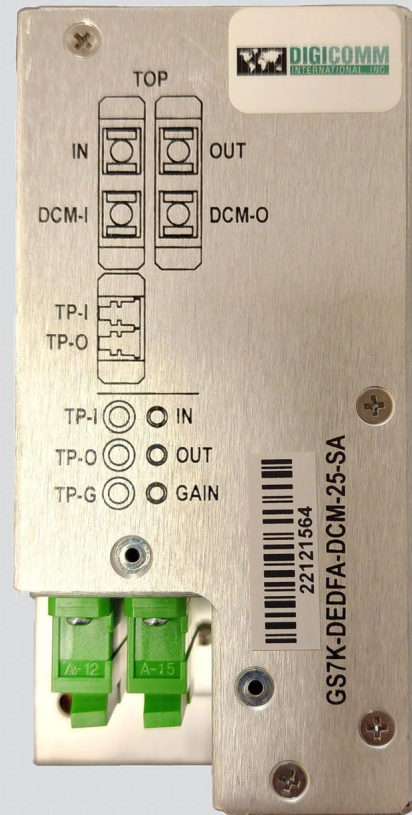


DIGICOMM DIGITAL ERBIUM- DOPED FIBER AMPLIFIER (D-EDFA)

FEATURES

- Constant fixed gain over a wide range of optical inputs
- Designed for low input and high gain
- Low noise figure for improved OSNR
- Gain flatness from ITU 16 to ITU 63 (48λ's)
- Flat gain over the wide optical input power range
- Optical test points to monitor input and output light level
- Mid-stage access to add dispersion compensation
- Wide operating temperature range
- Hot Pluggable



OVERVIEW

Digicomm International's Digital EDFA (D-EDFA) has been designed from the ground up to support today's digital optical transport links. Whether transporting PON, Gigabit Ethernet, DAA (R-PHY) or any other digital traffic, these dual-stage EDFAs offer a significant improvement over existing EDFAs through increased performance due to an extremely low OSNR, an expanded band pass (ITU channels 16-63), the ability to insert external dispersion compensation mid-stage and exceptional flatness. The Digicomm D-EDFA is designed to plug into the Cisco O-Hub platform, is hot swappable, has input and output optical test points and can be monitored locally and remotely. The unparalleled reach results in fewer EDFAs being needed in cascade, reducing cost and increasing operational simplicity.

OPTICAL SPECIFICATIONS

Parameters	Units	Typical	Comments
Wavelength Range	nm	1525 to 1565	Digital Applications
Input Power	dBm	>-30/ wavelength, Target -5 Composite	P_{in-max} is determined by the Gain and Maximum Output power of the EDFA.
Output Power	dBm	20 (100 mW)	Maximum Output Power
Gain	dB	25	Recommended for Digital Applications.
Gain Flatness	dB	±1.0	Across operating temperature range and power
Noise Figure	dB	5.0	(5.0 dB typical / 5.5 dB max)
Input Test Point	dB	-20	
Output Test Point	dB	-20	
Return Loss	dB	≥55	
Directivity	dB	≥55	
Polarization Mode Dispersion	ps	≤0.1	
Output Power Stability	dB	≤0.1	

Environmental Specifications (Cisco O-HUB Platform)

Parameters	Units	Typical	Comments
Operating Temperature	°C	-40 to 65	
Storage Temperature	°C	-40 to 85	
Operating Humidity	%RH	5 to 85	
Storage Humidity	%RH	5 to 85	

Electrical & Mechanical Specifications

Parameters	Units	Typical	Comments
Operating Voltage	V	24	
Power dissipation	W	10	

ORDERING INFORMATION

PART NUMBER	DESCRIPTION
GS7K-DEDFA-DCM-25-SA	Amplifier, EDFA, Digital, Gain Flattened, 25dBm (48 Wavelengths), with DCM Access, For GS7000 Optical Hubs