Space-Qualified Erbium-Doped Fiber Gain-Block Module (C-band)

AER-SCEFA-00-00-M

Features

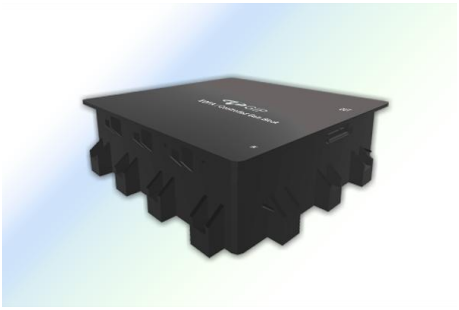
- High saturated output power up to 36dBm
- Optically isolated input and output ports to minimize system susceptibility due to connector reflections
- Input and output signal monitoring
- High-reliability and high-availability

Applications

- Optical ground stations
- Optical inter-satellite links
- Free space optics
- Free space communications

Description

GIP Technology The Space-Qualified Erbium-Doped Fiber Controlled Gain Block Module (AER-SCEFA-00-00-M) is designed for high-power single-channel applications. This series adopts a special, unique, and flexible structure that maximizes signal gain and saturated output power while minimizing noise figure. By optimizing these important amplifier parameters, the module can be easily deployed into any high-quality telecommunication platform.



The controlling electronics include the central microcontroller, optical power detection and reporting of EDFA input and output, and the pump laser current driving electronics.

The space-qualified EDFA fiber optics use radiation-hardened erbium-doped fibers or erbium/ytterbium co-doped fibers as the gain medium. In addition, all other passive fiber optic components are either high-reliability category items or the best-in-class high-power fiber optics. The device is designed with a very compact size, offering user-friendly status monitoring, and can be easily accessed through RS-232/RS422 or UART electrical interfaces.

GIP
Brightening Your Solutions

GIP Technology Corporation
6F., No. 112, Xinmin St., Zhonghe Dist.,
New Taipei City 235, Taiwan (R.O.C.)
T:+886-2-8226-7855 www.giptek.com
F:+886-2-8226-7955 sales@giptek.com

Specifications

Optical Information	Unit	Description
Control mode		ACC/APC
Polarization		Linear / Random
Operating wavelength	nm	1535 ~ 1562
Input power range	dBm	-5 ~ +10
Saturation output power*1	dBm	30 ~ 36
Connector		FC/APC
Electrical Information		
Operating voltage	Vdc	+5 / +12/ +28
Control interface		RS232 / RS422
Environmental Information		
Operating case temperature	°C	-20 ~ +55
Storage temperature	°C	-20 ~ +80
Relative humidity (non-condense)	%	5 ~ 85
Radiation		Contact us for details

*1. Saturated power is composed of optical signal and ASE power.