



050-602

Product Brief
Fiber Optic Amplifier, 1 - 2W
for Free Space Optical Link Applications
Conduction Cooled for Operation in Vacuum Environment

20U2-1602

THIS COPYRIGHTED DOCUMENT IS THE PROPERTY OF GLENAIR, INC. AND IS FURNISHED ON THE CONDITION THAT IT IS NOT TO BE DISCLOSED, REPRODUCED IN WHOLE OR IN PART, OR USED TO SOLICIT QUOTATIONS FROM COMPETITIVE SOURCES, OR USED FOR MANUFACTURE BY ANYONE OTHER THAN GLENAIR, INC. WITHOUT WRITTEN PERMISSION FROM GLENAIR, INC. THE INFORMATION HEREIN HAS BEEN DEVELOPED AT GLENAIR'S EXPENSE AND MAY BE USED FOR ENGINEERING EVALUATION AND INCORPORATION INTO TECHNICAL SPECIFICATIONS AND OTHER DOCUMENTS WHICH SPECIFY PROCUREMENT OF PRODUCTS FROM GLENAIR, INC.

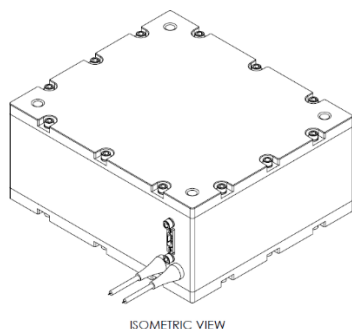


050-602 PRODUCT BRIEF

1-2W Optical Fiber Amplifier

Conduction cooling for operation in vacuum environment

Fiber Amplifier



The Glenair 050-602 is a ruggedized 1W or 2W ErYb-doped fiberoptic amplifier providing amplification in the 1535nm-1565nm wavelength region. The Fiber Amplifier is designed to operate in a vacuum environment with conduction cooling. The design has been ruggedized and optimized to operate over a wide temperature range. The power supply is designed to operate with 10 – 32 VDC.

KEY FEATURES/BENEFITS

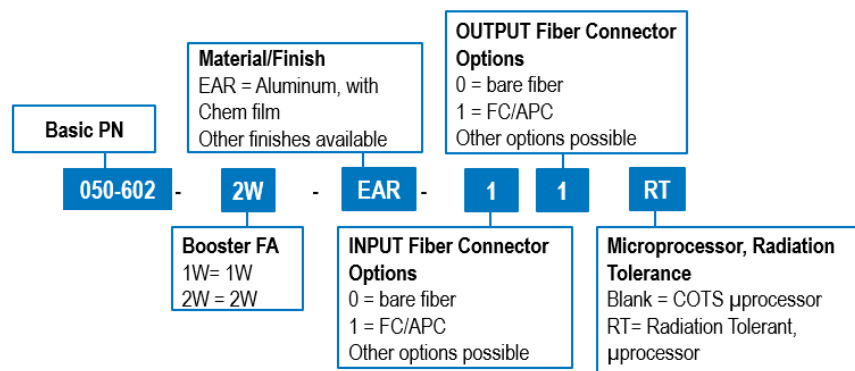
- SM Booster Fiber Amplifier with up to +33 dBm output power
- Typical NF < 7 dB
- Conduction Cooling
- Control & Telemetry via serial interface (RS422 / RS485)
- Operating Case Temperature, -5°C to +50°C
- Input power (Pin) -3 dBm < Pin < +12dBm
- Pout Stability +/- 0.2dB

- Material: Aluminum 6061-T651
- Size: Approx. 8.8 cm x 10 cm x 4.5 cm
- Chassis Ground isolated from Signal Ground
- OPTIONAL: Radiation Tolerant Microprocessor with radiation performance as follows (uP only):
 - No Single Event Latch-up Below an LET Threshold of 60 MeV.cm² /mg @125°C
 - Total Ionizing Dose of 30 krad(Si) RHA

APPLICATIONS

- Harsh Environments such as: Space, Airborne, Mobile, Tactical, Railway, Industrial, Oil and Gas and Shipboard applications
- CubeSats

How To Order



Functional Block Diagram

