

Close-Loop VOA Power Controller

(patent pending)

Product Description

The close-loop Variable Optic Attenuator provides real-time monitoring and control of optical power. The close-loop monitoring and control eliminates most of the power variations, such as PDL, WDL, TDL, etc. The close-loop series VOA is particularly suitable for continuous power regulating operation and optical transient suppression, as well as analog signal modulation applications.

The close-loop Series VOA is available in either normally-open or normally-closed configurations.

Performance Specifications

| Close-loop SS VOA | | Unit | |
|-----------------------------------|---------------------------|------------------|----|
| Wavelength | 850, 1260~1360, 1510~1610 | nm | |
| Insertion Loss ¹ | < 0.8 | dB | |
| Wavelength Dependent Loss (WDL) | < 0.2 | dB | |
| Temperature Dependent Loss (TDL) | < ± 0.15 | dB | |
| Polarization Dependent Loss (PDL) | 0 to 10dB > 10dB | < 0.10 < 0.20 | dB |
| Return Loss | > 55 | dB | |
| Dynamic Range | > 25 | dB | |
| Response Time | < 0.01 to 5ms | µs | |
| Electrically Power consumption | < 0.2 | W | |
| Resolution | Continuous | dB | |
| Operating Optical Power | < 500 | mW | |
| Operating Voltage | 0~5 | V | |
| Operating Temperature | -5 ~ 70 | °C | |
| Storage Temperature | -40 ~ 85 | °C | |
| Fiber Type | Corning SMF-28 | | |
| Package Dimension | (L)115x(W)76X(H)25 | mm | |

Notes:

1. Excluding Connectors

Features

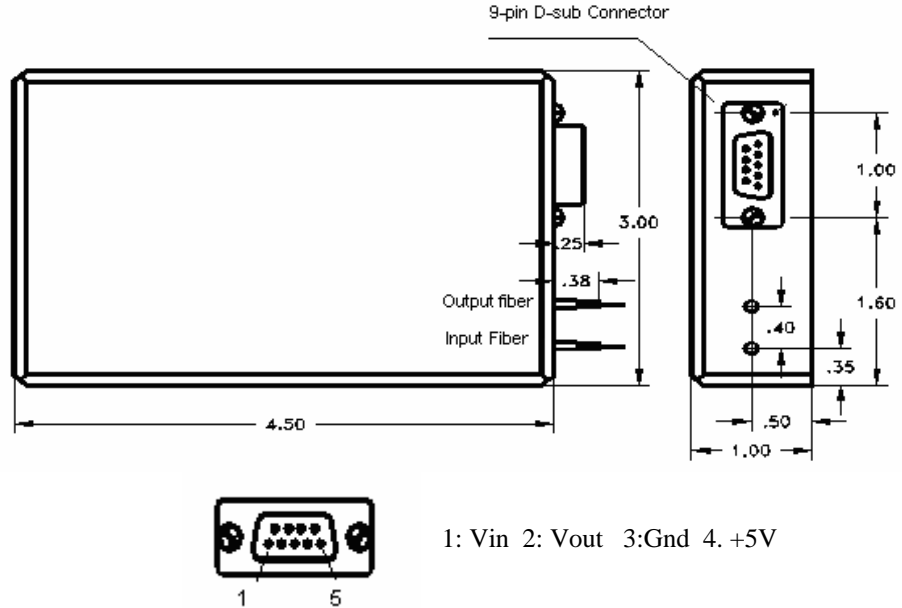
- High Reliability
- Close-loop control
- Low IL and PDL
- Precision optical power control
- Epoxy-Free Optical Path

Applications

- Optical Power Control
- Optical Power Regulation
- Optical Power Balance
- Instrumentation

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Mechanical Footprint Dimensions (Unit:inch)



Electrical Connector Configurations

| Pin Name | Vin | Vout | Gnd | +5V |
|---------------|-----------------------------|------------------------------|------------------------------|--------------|
| Specification | Control Voltage input, 0-4V | Power monitor, output, 0- 4V | Ground for Vin, Vout and +5V | 4.5V to 5.5V |

Ordering Information

| CVOA | Type | Wavelength | Off State | Package Type | Fiber Type | Fiber Length | Connector Type | |
|--|---------------------------|--|--|--------------|---|---|--|--|
| <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | Standard=11 Special=00 | 1310=3 1410=4 1550=5 850 =8 1260-1610= 2 1310/1550=9 Special=0 | Normally open = 1 Normally closed = 2 | | SMF-28 250um =1 SMF-28 900um =2 Special = 0 | Bare fiber=1 900um tube=3 Special=0 | 0.25m= 1 0.5m = 2 1.0 m= 3 Special =0 | None = 1 FC/PC = 2 FC/APC = 3 SC/PC = 4 SC/APC = 5 ST/PC = 6 LC = 7 Special = 0 |