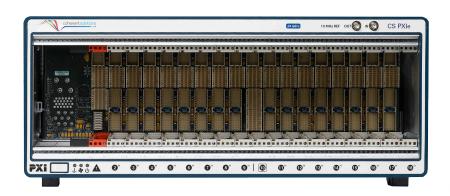
## **PRELIMINARY**







# **VOA**PXIe

## Precise and Fast Variable Optical Attenuator

The built-in power meter and power stabilization function lets you set and maintain the output power stability even when the input power fluctuates. You will get reliable and repeatable test results, each and every time with VOAPXIe. The VOAPxie seamlessly integrates with PXIe mainframe, allowing for scalability.

#### **Key Features**

- · 2 attenuators per blade
- · Choose between broad and narrow wavelength
- Integrated Power Meters for precise output power control
- · Low insertion loss

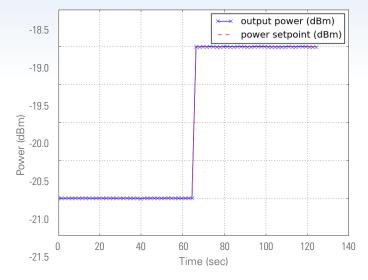
#### **Stable Output Power**

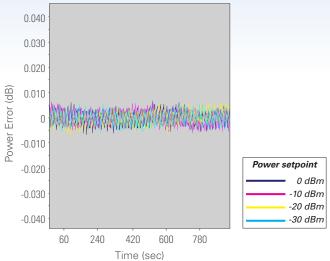
The built-in power meter and power stabilization function lets you set and maintain the output power stability even when the input power fluctuates. You will get reliable and repeatable test results, each and every time.

Coherent Solution's VOAPXIe is a reliable, fast and high density attenuation solution for research and continuous-production environments. Each blade has an integrated power meter for precise output power control, even with fluctuating input. With up to 17 VOAPXIes in a single chassis, you have up to 34 individual attenuators - which can be controlled individually or in sync through one, intuitive software application.

### **VOAPXIe Power Control**

## **VOAPXIe Power Stability - Power Mode**





This graph illustrates how quickly Coherent Solutions' VOA moves to the desired setpoint.

This graph illustrates the power output stability of < 0.005 dB RMS at various power setpoints.

## Technical Specifications<sup>1</sup>

| Model Number                                  | 1001-2   | 1002-2                | 1003-2                | 1004-2                | 1005-2                |  |  |
|---|--|-----------------------|-----------------------|-----------------------|-----------------------|--|--|
|   | CWDM8  | Broadband             | 1310 nm               | 1490 nm               | 1550 nm               |  |  |
| Fiber Connector                               | FC/PC, FC/APC, SC/APC, SC/PC                   |                       |                       |                       |                       |  |  |
| Fiber Type                                    | SMF-28   |                       |                       |                       |                       |  |  |
| Number of Channels                            | 2  |                       |                       |                       |                       |  |  |
| Wavelength range                              | 1260 nm to<br>1650 nm                          | 1260 nm to<br>1650 nm | 1260 nm to<br>1360 nm | 1440 nm to<br>1530 nm | 1520 nm to<br>1650 nm |  |  |
| Power   | -50 to +20 dBm                                 |                       |                       |                       |                       |  |  |
| Damage level                                  | +23 dBm  |                       |                       |                       |                       |  |  |
| Insertion Loss <sup>3</sup>                   | < 1.3 dB<br>at 1310nm                          | < 2.0 dB              | < 1.3 dB<br>at 1310nm | < 1.8 dB              | < 1.3 dB<br>at 1550nm |  |  |
| WDL   | < 0.02 dB/nm                                   |                       |                       |                       |                       |  |  |
| Return loss <sup>3</sup>                      | > 45 dB  |                       |                       |                       |                       |  |  |
| Warm-up time                                  | < 20 mins                                      |                       |                       |                       |                       |  |  |
| Bus Connector                                 | PXIe   |                       |                       |                       |                       |  |  |
| PXI slots                                     | 1  |                       |                       |                       |                       |  |  |
| Dimensions ( <b>H</b> x <b>W</b> x <b>D</b> ) | 130 mm x 20mm x 215 mm<br>(5.1" x 0.8" x 8.5") |                       |                       |                       |                       |  |  |
| Weight  | ~ 1 kg<br>(~2.2 lbs)                           |                       |                       |                       |                       |  |  |
| Operating temperature range                   | 5 °C to 45 °C<br>(41 °F to 113 °F)             |                       |                       |                       |                       |  |  |
| Storage temperature range                     | -40 °C to 70 °C<br>(-40 °F to 158 °F)          |                       |                       |                       |                       |  |  |

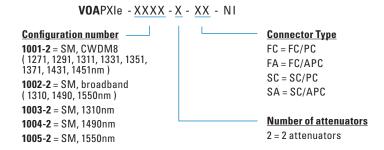
| Attenuator                     | 1001-2                      | 1002-2                       | 1003-2  | 1004-2  | 1005-2  |  |
|--------------------------------|-----------------------------|------------------------------|---------|---------|---------|--|
| Calibration wavelengths        | 1310 nm,1490 nm,<br>1550 nm | 1310 nm, 1490 nm,<br>1550 nm | 1310 nm | 1490 nm | 1550 nm |  |
| Attenuation range (typical)    | > 46 dB                     |                              |         |         |         |  |
| Attenuation range (guaranteed) | > 44 dB                     |                              |         |         |         |  |
| Resolution                     | 0.01 dB                     |                              |         |         |         |  |
| Attenuation speed              | 0.1 to 1000 dB/s            |                              |         |         |         |  |

| Power meter  | 1001-2  | 1002-2                       | 1003-2    | 1004-2  | 1005-2    |  |
|--|---|------------------------------|-----------|---------|-----------|--|
| Calibration wavelengths                            | 1271 nm, 1291 nm,<br>1311 nm, 1331 nm,<br>1351 nm, 1371 nm,<br>1391 nm,1411 nm,<br>1490 nm, 1550 nm | 1310 nm, 1490 nm,<br>1550 nm | 1310 nm   | 1490 nm | 1550 nm   |  |
| Polarization dependent responsivity <sup>2,3</sup> | < 0.2 dB  |                              |           |         |           |  |
| Linearity <sup>2,5</sup>                           | ± 0.1 dB  |                              | ± 0.08 dB |         | ± 0.06 dB |  |
| Total Uncertainty <sup>2,3,5</sup>                 | ± 0.34 dB (typ)<br>± 0.55 dB (max)  |                              |           |         |           |  |
| Averaging time                                     | 100 µs to 10 s  |                              |           |         |           |  |
| Data logging                                       | 1 to 1024 points per port   |                              |           |         |           |  |
| Resolution   | 0.01 dB   |                              |           |         |           |  |

#### **PRELIMINARY SPECS AS OF JUNE 2018**

Notes: 1 Specifications are valid at 23 °C ± 3 °C. 2+10 dBm to -40 dBm, 23 °C. 3 Excluding connectors. 4 < 10 dB attenuation. 5 at calibration wavelengths.

## **Ordering Information**





## To find out more, get in touch with us today.

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