



PowerPXle-1500

PowerPXle 1500 Series

Analog Power Meter

ADVANCE SPEC SHEET

Coherent Solutions' PowerPXle 1500 Series analog power meter brings cost-effective test and measurement in convenient PXle form factor.

The PowerPXle-1500 provides logarithmic analog output as well as a digital optical power meter for applications that require real-time feedback.

Integrating seamlessly with our PXle optical modules, PowerPXle-1500 enables new measurement capabilities for truly effective mixed-signal testing.



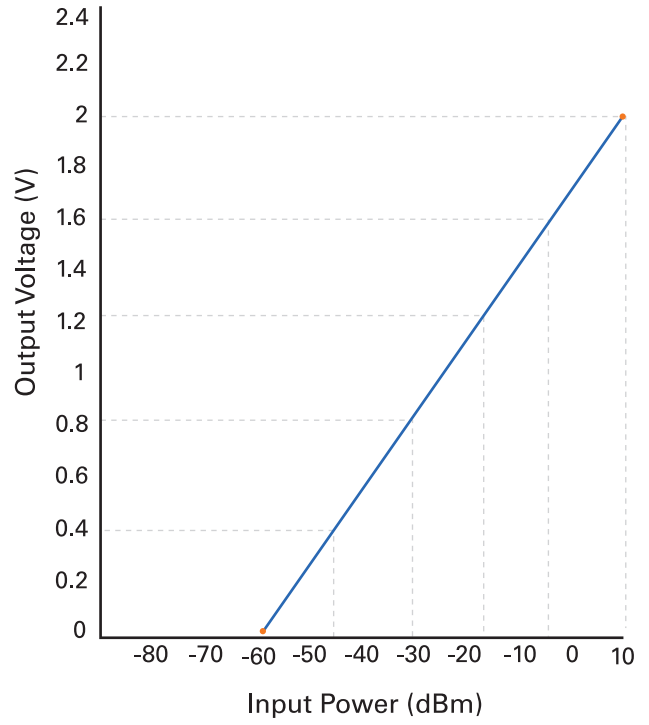
Key Features

- Logarithmic Analog Output: output voltage is linear with optical power in dBm
- Includes built-in digital optical Power meter
- Supports single mode and multi-mode applications
- 70 dB of dynamic range (+10 dBm to -60 dBm)

Applications

- Perfect for analog control loops that require feedback of the optical power
- Automate mechanical fiber positioning in your production environment
- Quickly characterize modulator transfer functions
- Measure insertion versus wavelength of your components using a swept laser

Analog Output



The world-leader in PXI optical test & measurement

Our portfolio of PXI optical test modules is rapidly expanding to meet a wide range of customer requirements and applications.

Over 15 years of experience designing and building advanced coherent optical communications instruments gives us the expertise to quickly and cost-effectively customize our products to meet your requirements. If you don't see what you need, contact us today at sales@coherent-solutions.com.



LaserPXIe **Tunable Laser Source**

Full tunability across C and/or L band. Narrow 100 kHz linewidth, up to 15 dBm of power.



PowerPXIe **Terminating Power Meter**

Large-area detector power meter available with either large dynamic range or high sensitivity. Equipped with an external trigger input.



VOAPXIe **Variable Optical Attenuator**

Operates in fixed attenuation or constant output power modes. Integrated power meter for precise output power control.



PassivePXIe **Passive component integration**

Integrate passive optical components of your choice in a single or dual slot module. WDM couplers, splitters, band-pass filters, PM beamsplitters, circulators and more.



O2EPXIe **Optical-to-Electrical Converter**

High bandwidth, broadband O-to-E converter. AC or DC coupling, various conversion gain and operating wavelength range.



SwitchPXIe **Automated Optical Switch**

Proven reliability and fast switching time. Various wavelength options including 850 nm, 980 nm, 1310 nm & 1550 nm.



TrayPXIe **Passive Component Organizer**

Protect your passive fiber optic components to keep your workspace tidy & safe.



DopplerPXIe **Photonic Doppler Velocimeter**

Purpose-built module for Photonic Doppler Velocimetry. A circulator, two VOAs and a passive coupler all built into one compact module.



OSAPXIe **Optical Spectrum Analyzer**

Fast spectral test and measurement in a compact 2-slot module. O, C and L band options.



The perfect PXI chassis to suit your application

From a smaller 4-slot to the 18-slot rack mountable chassis, we can provide the perfect National Instruments PXIe chassis to suit your application.

Technical Specifications

General Specifications	PowerPXle-1501
Bus Connector	PXle
Optical connector type	FC or SC
Slot count	1
Number of channels	2
Dimensions H x W x D	130 x 20 x 215 mm 5.1 x 0.8 x 8.5 inch
Weight	~ 1 kg ~ 2.2 lbs
Operating temperature range	5 °C to 45 °C 41 °F to 113 °F
Storage temperature range	-40 °C to 70 °C -40 °F to 158 °F
Model Number	1501
Sensor	InGaAs 2mm
Wavelength	750 to 1700nm
Power	-60 to +10dBm
Damage level	+12dBm
Polarization dependent responsivity ^{2,3}	<0.2 dB
Analog Output	1501
Electrical connector	SMA
Output impedance	1Mohm
Max output	< 2.5V
Conversion gain	25mV/dB
Linearity ²	± 0.25dB
3dB frequency response @ 1550nm	> -20dBm: 1MHz; >-30dBm: 350kHz; >-40dBm: 25kHz
Digital Power Meter	1501
Calibration wavelengths	850, 1310, 1490, 1550
Linearity ^{2,5}	± 0.1dB
Total uncertainty ^{2,3,5}	± 0.34 dB (Typical) ± 0.55 dB (Max)
Averaging time	100us to 10 s
Resolution	0.01 dB
3dB frequency response	5kHz
Averaging time/ sample time	100us to 10 s
Data logging capability	1 to 1024 points per channel
PXle trigger capability	Yes

ADVANCE SPECS AS AT SEPTEMBER 2018

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



Ordering Information

PowerPXle: XXXX - X - XX

Configuration Number

1501 = InGaAs detector with analogue output

Connector Type

FC = FC
SC = SC

Number of Channels

2 = 2 Power meter channels

About Coherent Solutions

Coherent Solutions is the world-leader in PXI optical test and measurement. Our portfolio of PXI optical test modules is rapidly expanding to meet the needs of engineers and scientists around the globe. From enabling pioneering experiments to driving highly-efficient production testing, you'll find us working with customers to solve complex problems with simple and elegant solutions.

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

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