



PowerPXle-1401

PowerPXle 1400 Series

Power Meter

SPEC SHEET

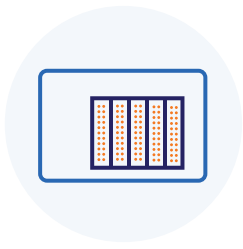
Coherent Solutions' PowerPXle 1400 Series optical power meter provides cost-effective test and measurement in a compact PXle form factor.

With its logarithmic amplifier, the PowerPXle-1400 avoids gain-jumps faced by multi-stage linear amplifier power meters.

Seamless integration with our range of PXle optical modules means the PowerPXle-1400 will quickly become an essential component of your test system.



Features



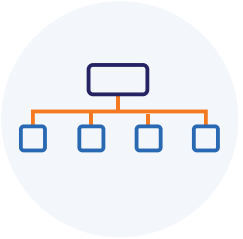
2 or 4 power meters per single-slot module

Achieve high channel density with up to 68 channels in an 18-slot PXI chassis.



Single logarithmic amplifier

Use of a logarithmic amplifier eliminates the gain jumps exhibited by power meters with multi-stage linear amplifiers. Get consistent and reliable measurement at all power levels.



Seamless PXI integration

Take advantage of PXI's integrated triggering and synchronization capabilities across electrical and optical instruments.

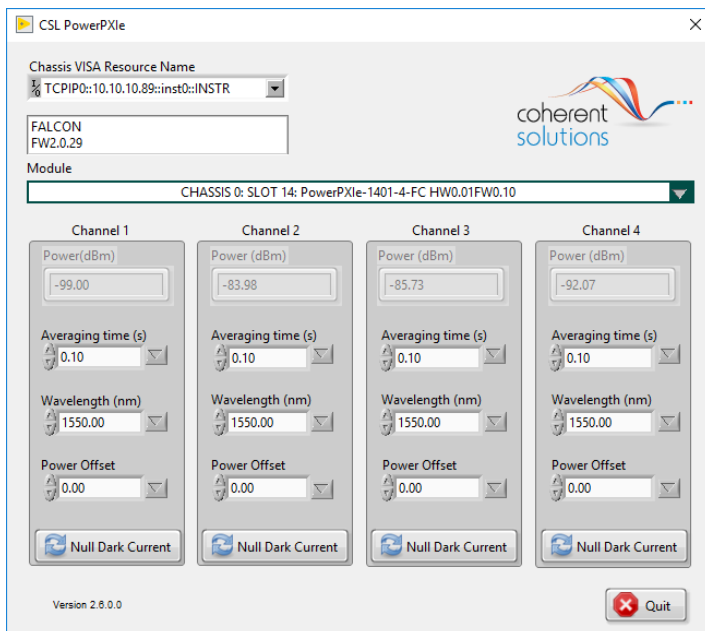


Large format view

cohesionUI makes it simple to control PowerPXle from your PC or mobile device. Plus, large format view mode makes it easy to monitor your instrument even when working away from your desk.

Ready to use in LabVIEW®

PowerPXle comes with LabVIEW® drivers/softpanels in addition to its web-based graphical user interface (GUI) for a hassle free integration into your test environment. Not a LabVIEW user? Control PowerPXle using a comprehensive set of SCPI commands from any programming language.



PowerPXle-1401 4-channel power measurement with LabVIEW soft panel

cohesionUI graphical user interface makes it simple to control PXIe instruments from your PC or mobile device. Its cutting edge design offers a sleek modern interface, cross device compatibility, customizable views and remote network access.

POWERPXIE | SLOT 14 1401-4-FC CSL-184412 HW0.01FW0.10

CHANNEL 1		CHANNEL 2	
POWER	-97.97 dBm	POWER	-82.74 dBm
POWER OFFSET	1.00 dBm	POWER OFFSET	0.00 dBm
AVERAGING TIME	1.000 s	AVERAGING TIME	0.100 s
WAVELENGTH	1547.000 nm	WAVELENGTH	1550.000 nm

CHANNEL 3		CHANNEL 4	
POWER	-82.70 dBm	POWER	-88.83 dBm
POWER OFFSET	0.00 dBm	POWER OFFSET	0.00 dBm
AVERAGING TIME	0.100 s	AVERAGING TIME	0.100 s
WAVELENGTH	1550.000 nm	WAVELENGTH	1550.000 nm

Navigation: HOME, MODULES, SETTINGS, Large Format, Info

PowerPXIe-1401 4-channel power measurement control in cohesionUI

POWERPXIE | SLOT 14 CHANNEL 1
1401-4-FC CSL-184412 HW0.1FW0.10

POWER	9.00 dBm	
POWER OFFSET	0.00 dBm	[-] [+]
AVERAGING TIME	0.100 s	[-] [+]
WAVELENGTH	1550.000 nm	[-] [+]

Navigation: HOME, MODULES, SETTINGS, Regular Format, Info

PowerPXIe-1401 4-channel large format view in cohesionUI

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.

Our 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 Versatile Laser Source

Versatile range of laser sources including fully-tunable C and/or L band or fixed wavelength.



PowerPXIe Optical Power Meter

Large-area detector power meter available in various specifications. Options include external trigger input and analog output.



VOAPXIe Variable Optical Attenuator

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



OSAPXIe Optical Spectrum Analyzer

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



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.



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.



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.



TrayPXIe Passive Component Organizer

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



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 - Preliminary

General Specifications	PowerPXle
Bus connection	PXle
Slot count	1
Dimensions (HxWxD)	130 mm x 20 mm x 215 mm 5.1" x 0.8" x 8.5"
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	1401
Optical connector type	FC or SC
Number of channels	2 or 4
Wavelength range	750 to 1700 nm
Power	-60 to +10 dBm
Sensor	InGaAs
Uncertainty ^{2,3,5}	± 0.29 dB (Typical) ± 0.50 dB (Max)
Linearity ^{2,5}	± 0.1 dB, -40 to 0 dBm; ± 0.2 dB, -50 to -40 dBm
Return loss ⁶	>45 dB
Average time of monitor power meter	100 µs to 10 s
Data logging capability	Up to 1024 samples per channel on channel 1 and 2 only
Damage level	+ 12 dBm

PRELIMINARY SPECS AS OF JULY 2019

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.

6 Wavelength 1550 nm ± 30 nm, standard single-mode fiber, angled connector 8°, T=23 °C ± 5 °C.

Ordering Information

PowerPXle - 1401 - X - XX

Connector type
FC = FC
SC = SC

Number of channels
2 = 2 Power meter channels
4 = 4 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 intuitive solutions.

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

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