

PXI Nanovolt Meter Bundle

PC-based nanovolt meter with expansion capability

Use this bundle for

- Automated device validation
- Integrated circuit characterization
- High performance power measurements
- High-channel-count test applications
- Combining measurements from different instruments in one system



Popular Features

Scalability

Simplify your benchtop by combining instruments in a single “box”

High Performance

Up to 28 bits resolution, and very high density nV-level measurements with low noise floor, as well as built-in averaging and auto-zeroing

Channel Count

Up to 32 single-ended multiplexed Analog Input channels



Do more in one box with NI PXI

The NI PXI Nanovolt Meter Bundle includes a PXIe-4309 analog input module in a 5-slot PXI Express based measurement system that is controlled through your laptop's Thunderbolt™ USB-C port.

Achieve high accuracy, high productivity, and higher speeds with the standard for automated test and automated measurement: NI PXI (PCI eXtensions for Instrumentation).



PXIe-4309 is a flexible, high resolution analog input module with up to 28 bits resolution. The module features on-board signal averaging and filtering, auto-zero measurement switching, and a chopping mode that uses a pair of channels to provide high levels of noise rejection which enables accurate and repeatable nano-volt measurements.

PXIe-AI5100 P/N: 867125-01	
What is Included	
Chassis	PXIe-1083
Module	PXIe-4309
Accessories	Thunderbolt cable Power cable, US* TB-4309 Front-mounted Terminal Block
Key Specifications	
Resolution	18-24 bits (depending on sample rate)
No. of simultaneous differential Analog Input channels	8
No. of single-ended multi-plexed Analog Input channels	32 (at 100k S/s/ch)
Max. Sample Rate	2 MS/s/ch
Analog Input Voltage Range	±0.1 V, ±1 V, ±10 V, ±15 V

*Check the product datasheet for part numbers with different regional power cords



Upgrade and do more with your system!

Don't be limited by vendor-defined configurations. Use the remaining 4 slots to build on top of your system and manage change. Add measurements, more channels, or new analysis routines without having to purchase a whole new instrument.

Start with these best-selling modules



P/N: 782856-03

Source Measure Unit

PXIe-4139

- 1-channel
- ± 60 V, ± 3 A DC, ± 10 A Pulsed
- 100 fA Current sensitivity
- Up to 40 W max power



P/N: 783590-02

Oscilloscope

PXIe-5105

- 8 simultaneously-sampled channels
- 12-bit vertical resolution
- 60 MHz Bandwidth
- 60 MS/s sample rate



P/N: 781056-01

Multifunction IO

PXIe-6363

- 32 Analog Input (16-bit, 2 MS/s)
- 4 Analog Output
- 48 DIO channels
- 4 32-bit counter/timers



P/N: 785114-01

Waveform Generator

PXIe-5413

- 20 MHz Bandwidth
- Up to two 16-bit channels
- 800 MS/s
- ± 12 V output range



P/N: 779647-11

Power Supply

PXIe-4110

- Two isolated channels
- Single non-isolated channel
- Up to 20 V, 1 A per channel
- Up to 46 W output power
- Hardware timing and triggering
- Output disconnect relays
- Four-wire remote sense



P/N: 780587-27

Multiplexer Switch

PXIe-2527

- 32 channel, 2-wire, 300 V, 2 A
- Electromechanical relay
- Supports 64x1 1-wire, 32x 2 2-wire, 16x1 4-wire configurations
- Onboard relay counting

Explore over 600 different PXI modules ranging from DC to mmWave.
Contact your NI product expert to get help solving your test challenges.



Select your software

Interactive Measurement with FlexLogger

- **Acquire** data from instruments in an intuitive no-code application software.
- **View** test with customizable dashboards, **save** data, and **analyze** with inline calculations.
- **Set** alarms to be notified of unexpected behavior

[Free Trial – Download](#)

Graphical Programming in LabVIEW

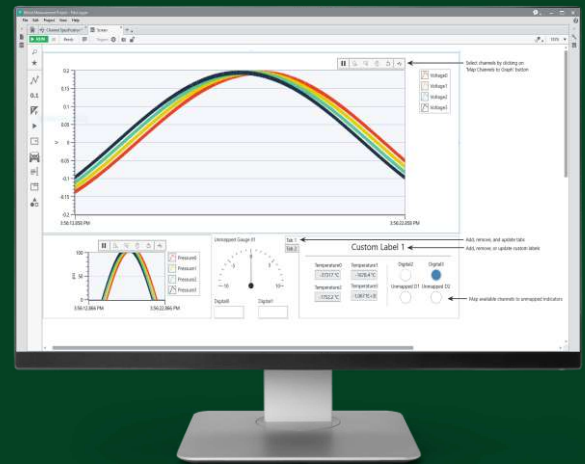
- **Acquire, process, and analyze data** from NI hardware or any 3rd party instrument
- **Create interactive UIs** for test monitoring and control.
- **Save data** to .csv, .tdms, or any custom-defined binary file.

Use Your Programming Language of Choice

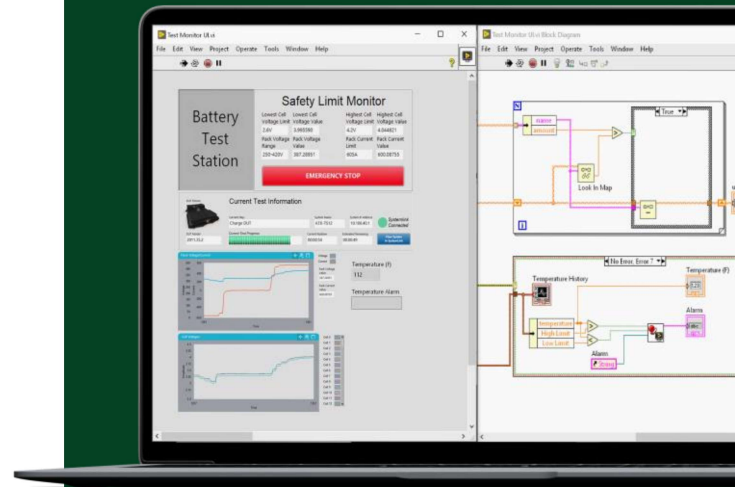
- **Drivers** for Python, C, C++, C#, .NET, and MATLAB®*

A Bundle of Software for Test

- **Develop** test systems faster with graphical programming in LabVIEW
- **Create** automated test sequences with TestStand
- **Build** web applications for test with G Web Development Software
- **Analyze** your data interactively with DIAdem
- **Perform** data acquisition and logging with FlexLogger



FlexLogger – Fast, Flexible, No-Code Software



"The move to a COTS approach using PXI and LabVIEW was critical to this production-test success at Philips. The combination of best-in-class modular hardware along with industry-standard software was pivotal to the millions of dollars and hundreds of hours saved in production test engineering"

-Neil Evans
Senior Manager, Philips

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