PXI Waveform Generator Bundles

PC-based waveform generators with interactive measurement software

Use these bundles for

- Automated device validation
- Combining measurements from different instruments in one system
- Interactively exercising devices-under-test using no-code InstrumentStudio PC software

Popular Features

Scalability

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

Synchronization

Multi-instrument synchronization by sharing timing and trigger signals through the PXI backplane

Memory

Onboard memory depth of up to 512 MB/ch

Do more in one box with NI PXI

The NI PXI Waveform Generator Bundles each include a PXIe Waveform Generator 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).

With the PXI waveform generators, generate standard functions and user-defined, arbitrary waveforms as part of a PXI system. The PXI Waveform Generator bundles feature up to 2 output channels with up to 80 MHz bandwidth, ± 12 V output range and 800 MS/s maximum update rate.

	PXIe-AWG5100 P/N: 867119-01	PXIe-AWG5101 P/N: 867120-01	PXIe-AWG5102 P/N: 867121-01	PXIe-AWG5103 P/N: 867122-01
What is Included				
Chassis	PXIe-1083			
Module	PXIe-5413 (1 ch)	PXIe-5413 (2 ch)	PXIe-5423	PXIe-5433
Accessories	Thunderbolt cable Power cable, US* SMA to SMA cable (x2)			
Key Specifications				
Number of channels	1	2	2	2
Maximum Bandwidth	20 MHz	20 MHz	40 MHz	80 MHz
Analog Output Voltage Range	± 12 V	± 12 V	± 12 V	± 12 V
AO Onboard Memory Size	128 MB	128 MB/ch	128 MB/ch	128 MB/ch
Maximum Update Rate	800 MS/s	800 MS/s	800 MS/s	800 MS/s
AO Resolution	16 bits	16 bits	16 bits	16 bits

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: 783129-01

Digital Multimeter

PXIe-4080

- 6 ½ digit, ±300 V, ±1A
- 2- or 4-wire resistance measurements up to 5 GΩ
- Isolated Digitizer mode - Up to 1.8 MS/s
- Frequency/period measurements
- Diode tests

P/N: 782856-03

Source Measure Unit (SMU)

PXIe-4139

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

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: 783590-02

Oscilloscope

PXIe-5105

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

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 InstrumentStudio

- **Control** all your instruments in a single, intuitive no-code application software.
- **Capture** screenshots, **export** data, and **share** projects with colleagues and between systems.
- **Monitor and debug** automated test systems

Free! – Download Now

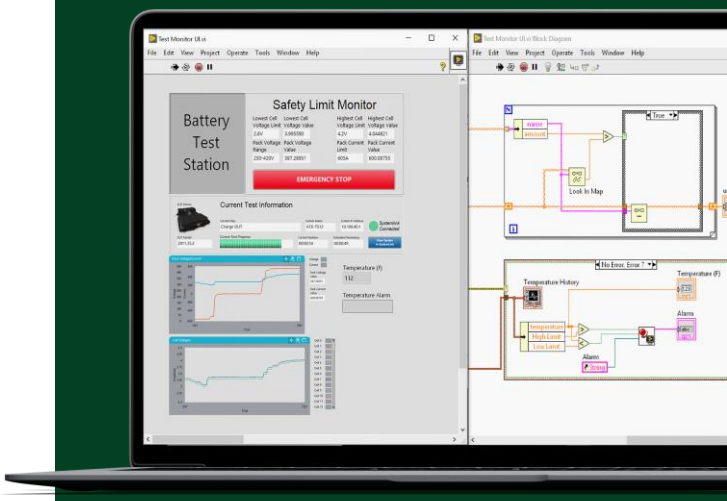
With InstrumentStudio, view data from all your instruments unified on high-resolution monitors rather than small, integrated displays.

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

"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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