

# 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,  $\pm 12\text{ V}$  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,  $\pm 300$  V,  $\pm 1$  A
- 2- or 4-wire resistance measurements up to 5 G $\Omega$
- 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
- $\pm 60$  V,  $\pm 3$  A DC,  $\pm 10$  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](#)

## Graphical Programming in LabVIEW

- **Acquire, process, and analyze data** from NI hardware or any 3<sup>rd</sup> 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

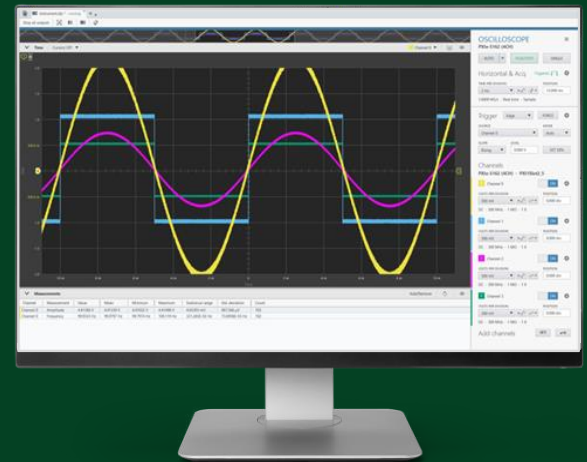
- **Drivers** for Python, C, C++, C#, .NET, and MATLAB®\*

## A Bundle of Software for Test

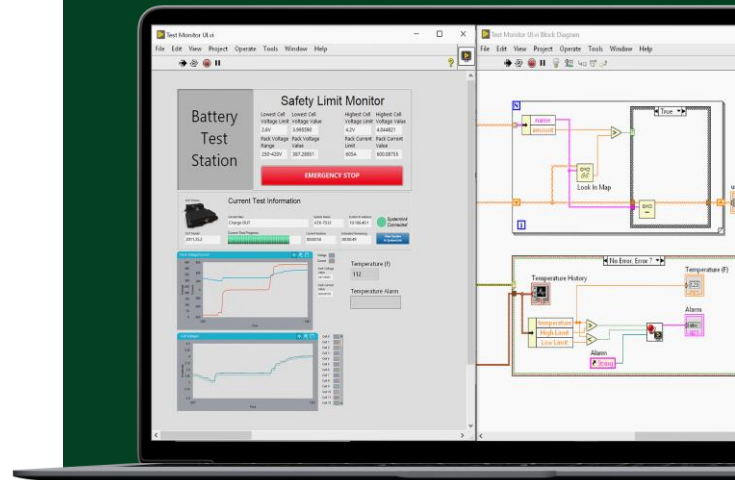
- **Develop** test systems faster with graphical programming in LabVIEW
- **Create** automated test sequences with TestStand
- **Build** web applications for test with G Web Development Software
- **Analyze** your data interactively with DIAdem
- **Perform** data acquisition and logging with FlexLogger

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



"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

