# PXI LCR Bundles

PC-based LCR Meters & SMUs with interactive measurement software

## Use PXI LCR Bundles for

- CV/IV testing with high channel density and no connection changes at the device under test (DUT)
- MEMS Structure Electrical Test
- Wafer Parametric Test
- Multilayer Ceramic Capacitor (MLCC) Validation & Test
- Combining measurements from different instruments in one system

## Popular Features

### 2-in-1

SMU and LCR meter combined in single instrument for an elegant bench solution

### Scalability

Combine with other types of instruments to build tightly integrated mixed-signal test systems

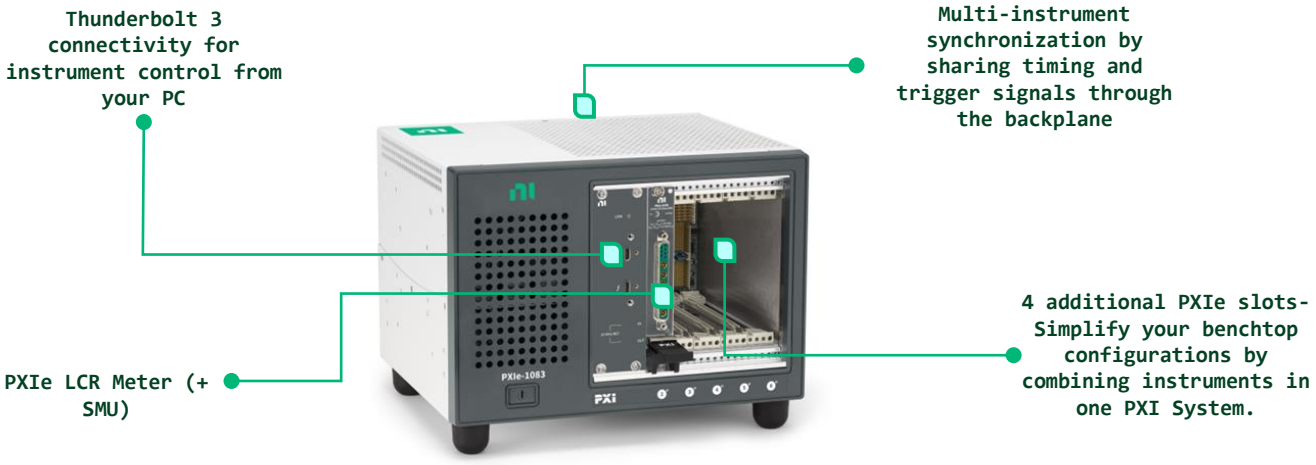
### Precision

Femtofarad-class capacitance measurements and femtoampere-class current measurements

# Do more in one box with NI PXI

The NI PXI LCR Bundles include a PXIe LCR Meter 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).




Make DC and impedance measurements in a seamless fashion with NI's PXIe-4190 - the world's first LCR Meter and SMU in a single instrument. This instrument provides femto-farad (10-15) class capacitance measurements and femto-amp current measurements in a single-slot PXI form factor. The new PXIe-4190 also removes the need for an additional switch to multiplex between the LCR Meter and SMU, allowing for a simplified test experience with higher throughput and lower capital cost.

| | **PXIe-LCR5100**<br>P/N: 867113-01 | **PXIe-LCR5101**<br>P/N: 867126-01 |
|---|---|---|
| **What is Included** | | |
| **Chassis** | PXIe-1083 | |
| **Module** | PXIe-4190 (40V) | PXIe-4190 (10 V) |
| **Accessories** | Thunderbolt cable<br>Power cable, US<br>DSub-to-BNC cable for I/O connectivity | |
| **Key Specifications** | | |
| **Bandwidth** | 2 MHz | 500 kHz |
| **Voltage Range** | ± 40 V DC Bias | ± 10 V DC Bias |
| **Max Current** | 100 mA | 100 mA |
| **Current Ranges** | 100 mA, 10 mA, 1 mA<br>100 µA, 10 µA, 1uA, 10nA, 1nA | -100 mA – 100 mA |

# 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: 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

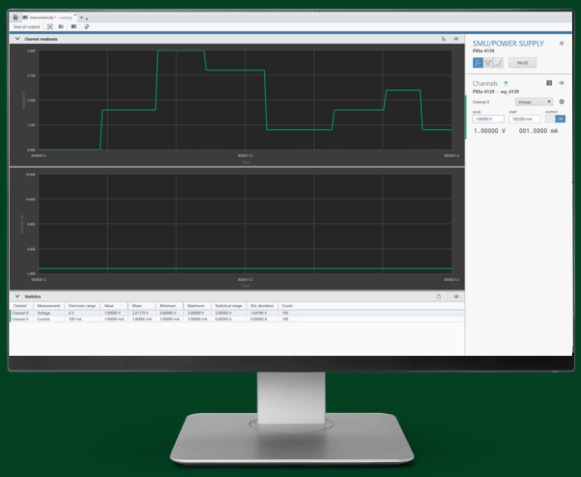
**Explore over 600 different PXI modules ranging from DC to mmWave.**
**Contact your NI product expert to get help solving your test challenges.**

# Select your software

## Interactive Measurement with 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



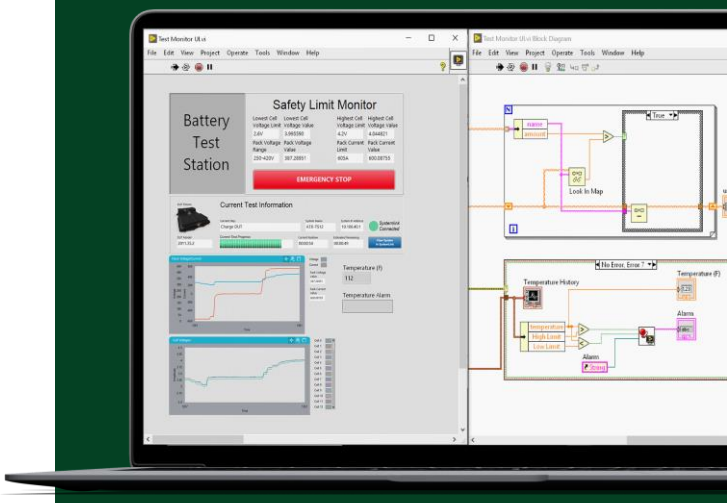
With InstrumentStudio, view data from all your instruments unified on high-resolution monitors rather than small, integrated displays.

## 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

US Corporate Headquarters
11500 N Mopac Expwy,
Austin, TX 78759-3504
T: 512 683 0100 F: 512 683 9300
info@ni.com