

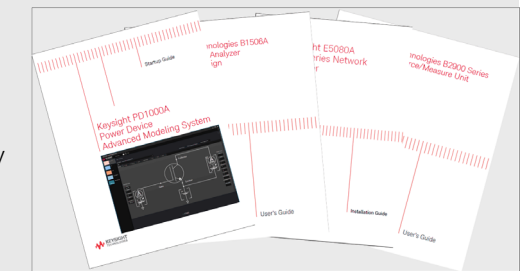
# READ ME FIRST!



Follow the prescribed installation process to install your PD1000A Power Device Measurement System for Advanced Modeling. Deviating from the process can result in unpredictable behavior.



For detailed installation, operation, and use instructions, as well as warranty and support information, read the PD1000A Startup Guide, the PD1000A Test Fixture Operating Guide, and the PD1000A Bias T Operating Guide available at [www.keysight.com/find/PD1000A](http://www.keysight.com/find/PD1000A).



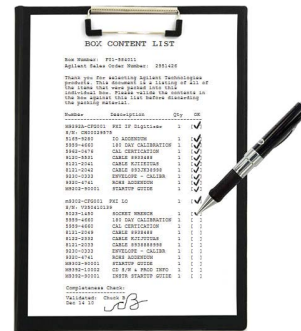
## 1. Unpack & Inspect



Your shipment will arrive in a consolidated crate -- separate instrument boxes inside the crate.

Carefully inspect your shipment for any shipping damage. Report any damage to the shipping agent immediately, as such damage is not covered by warranty.

## 2. Verify system components



Verify that you have the following for your system:

Complete Curve Tracer system requires:

- Keysight PD1000A-10x, includes:
  - Qty. 1, Keysight B1506A Power Device Analyzer
  - Options (choose one): 101, 102, 103, 104, 105, or 106

Temperature measurements in the B1506A requires:

- Keysight PD1000A-GTW, includes:
  - Qty. 1, E5810B LAN/GPIB/USB Gateway
- HP289-PM Thermal Platform (hot plate and controller) from inTEST (order directly from InTEST)
- Qty. 1, GPIB cable (PD1000A Options GP0 - GP8)

Complete S-Parameter Measurements requires:

- Keysight PD1000A-201 includes:
  - Qty. 1, Keysight E5080A ENA Vector Network Analyzer
  - opt. 245 2-port Test Set;
  - opt. 019 Std. Data Storage
  - opt. UNQ Std. Stability Timebase
- Keysight PD1000A-301 includes:
  - Qty. 1, Keysight B2902A Precision Source/Measure Unit
- Keysight PD1000A-SPK Accessory Kit includes:
  - Qty. 1, Keysight PD1010A-1FP license for S-Parameter Measurement Control, required after 30 day free trail
  - Qty. 2, Keysight Bias T Networks
  - Qty. 1, ea. Keysight Test Fixtures for TO-220, TO-247, and Surface Mount Devices (SMD)
  - Qty. 2, Male 'N' to Female SMA connectors
  - Qty. 2, 7" SMA (M) to SMA (M) cables
  - Qty. 8, Banana plug to Banana plug cables (4 Red, 4 Black, connects the B2902A to Bias Ts)
  - Qty. 1, 0.90 N-m, SMA Torque wrench
  - Qty. 1, carrying case

Each instrument comes complete with appropriate power cord for your location.

## 3. Install Keysight IO Libraries Suite and PD1000A Control Software for Power Device Measurement System onto host PC.

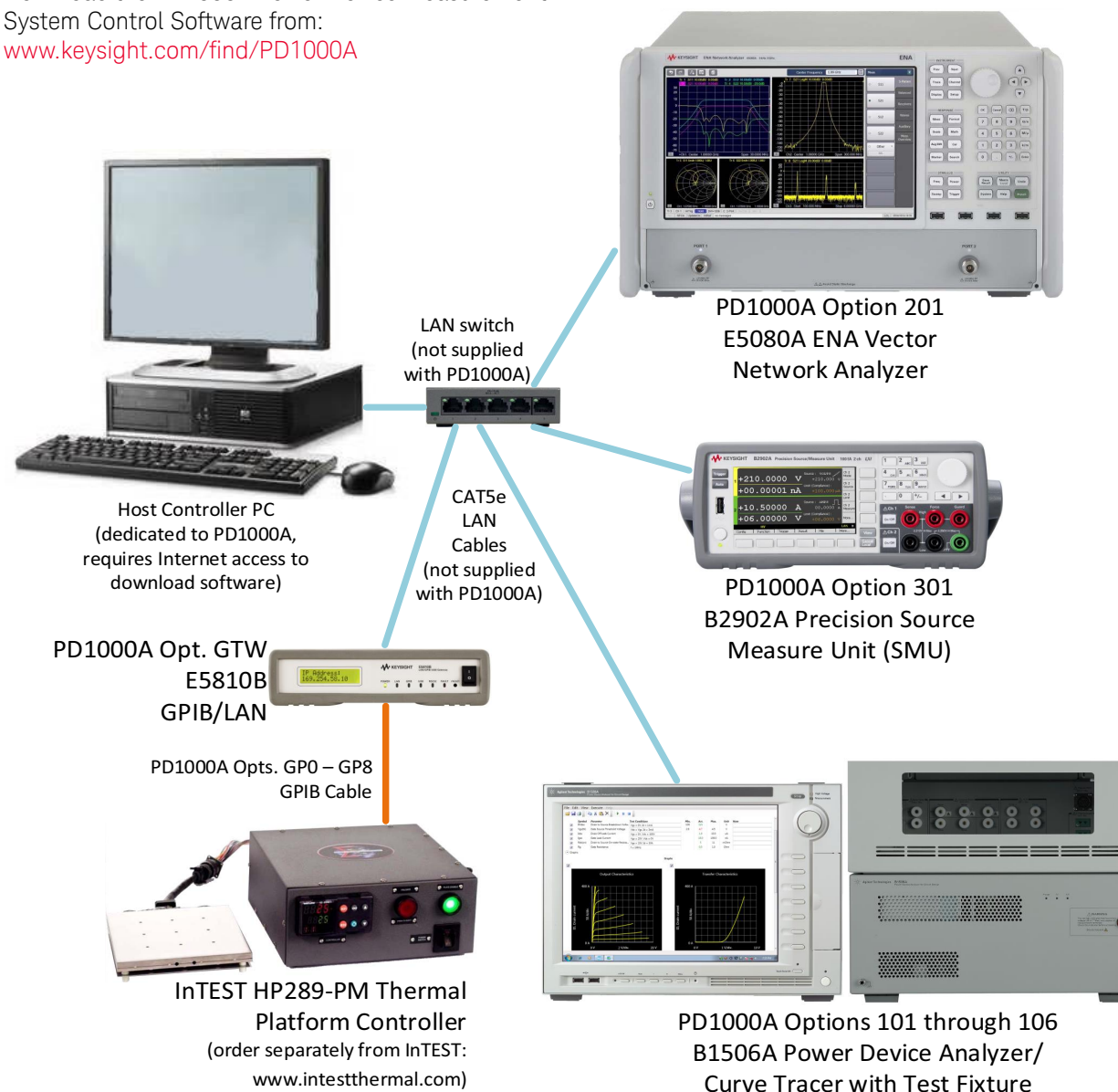
If not already installed on the host PC, download and install Keysight IO Libraries Suite from: [www.keysight.com/find/iosuite](http://www.keysight.com/find/iosuite)

Download the PD1000A Power Device Measurement System Control Software from: [www.keysight.com/find/PD1000A](http://www.keysight.com/find/PD1000A)

## 4. Set up the test system:

- Connect B1506A to its Test Chamber. Install HP289-PM Thermal Platform.
- Connect B2902A, E5080A ENA, DUT Test Fixture to Bias T networks.
- Connect LAN Cables, GPIB cable, etc. Make other instrument connections as needed.

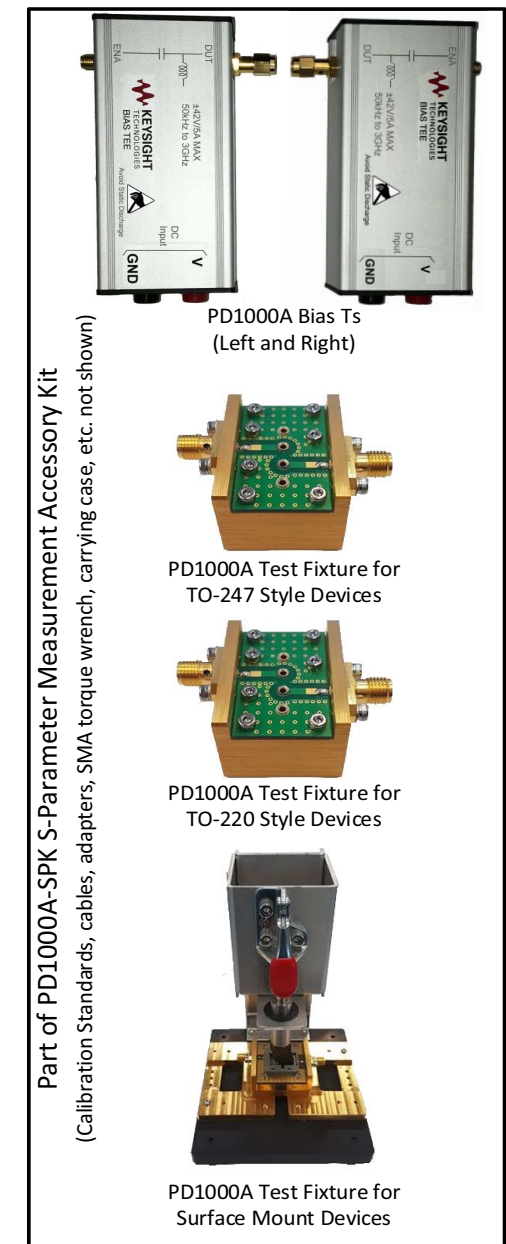
Refer to the PD1000A Startup Guide and the documentation for the individual instruments for detailed setup instructions.



### NOTE What is not Supplied by Keysight:

The customer must provide the following:

- HP289-PM Thermal Platform (hot plate and controller) from inTEST (order directly from InTEST: [www.intestthermal.com](http://www.intestthermal.com)), for use with B1506A)
- Dedicated host computer PC. See System Requirements in the PD1000A Startup Guide
- 5-port (minimum) LAN Switch
- Quantity 5, standard CAT5e LAN cables



## PD1000A Information

Congratulations on your purchase of a Keysight PD1000A Power Device Measurement System for Advanced Modeling.

This page provides general information about your PD1000A and tools to make using your system easier and productive.

**CAUTION** Read and follow all safety information provided in the product documentation.

**CAUTION** Follow all static-safe handling procedures when installing or removing instruments.

**NOTE** It is up to you, the customer or system integrator, to ensure that the PD1000A Power Device Measurement System for Advanced Modeling meets all regulatory requirements appropriate for the country where the system is installed. Also, there may be application-specific constraints (such as, but not limited to instrument cooling, trigger bus management, etc.). Refer to the individual instrument documentation for specific power and cooling requirements.

### Instrument Cabling:

Refer to individual instrument documentation for information and instructions on connecting instrument cables.

### PD1000A System Software:

Required PD1000A system software includes:

- PD1000A Control Software for Power Device Measurement System
- Power Electronics Model Generator
- Keysight Advanced Design System (ADS)

All PD1000A system software is available on the following Keysight websites:

[www.keysight.com/find/PD1000A](http://www.keysight.com/find/PD1000A)  
[www.keysight.com/find/EDA](http://www.keysight.com/find/EDA)

Software License Activation:

For the PD1000A software license and if you purchased one or more hardware licenses, you received Entitlement Certificates with your PD1000A shipment. Follow the instructions on the certificates. Go to [www.keysight.com/find/softwaremanager](http://www.keysight.com/find/softwaremanager) to register and obtain the actual license files.

### Documentation:

The *PD1000A Getting Started Guide* is the only system documentation. All other PD1000A documentation, including the Bias T and Test Fixtures documentation, and individual instrument documentation are available on-line. Refer to the individual instrument documentation and help files for operation and use instructions, specific warranty and support information.











[www.keysight.com/find/PD1000A](http://www.keysight.com/find/PD1000A)  
[www.keysight.com/find/B1506A](http://www.keysight.com/find/B1506A)  
[www.keysight.com/find/E5080A](http://www.keysight.com/find/E5080A)  
[www.keysight.com/find/B2902A](http://www.keysight.com/find/B2902A)

### Support:

Refer to the individual Keysight instrument documentation and help files provided with your system for warranty and support information. If any instrument requires support and must be returned to Keysight, return only the defective instrument under individual product warranty.

### Safety:

Instruments may display the following symbols:

-  **DANGER:** Hazardous voltage and potential for electric shock. Do not touch terminals that have this symbol when the equipment is on. Refer to manual for additional information.
-  Caution: Refer to accompanying documentation for additional safety information.
-  Earth Ground.
-  Frame or Chassis Terminal.
-  Alternating Current (AC).
-  Direct Current (DC).
-  Standby Power. Unit is not completely disconnected from AC mains when power switch is in standby position.
-  Hot Surface, avoid contact. Surface is hot and may cause personal injury if touched.
-  Low temperature or freezing conditions, avoid contact. Surface is hot and may cause personal injury if touched.
-  Indicates that anti-static precautions should be taken.



**HIGH VOLTAGE**  
is used in the operation of the  
B1506A Power Device Analyzer.  
**LETHAL VOLTAGE on CONTACT**

High voltage may be present on the B1506A measurement terminals. Take all safety precautions as outlined in the B1506A documentation.

- When the RED indicator lights, lethal voltage ( $\pm 10$  kV dc/pulse or greater depending on option) may appear at measurement terminal.
- Always use the safety interlock function.
- Potential less than  $\pm 500$  V may cause death under certain conditions. Therefore, adequate preventative measures must be taken at all times.

### Calibration Services

Keysight products are factory calibrated and shipped with an ISO-90002, NIST-traceable calibration certificate (if appropriate). Keysight instruments are tested and calibrated individually; there is no PD1000A system testing or calibration. For additional calibration service information, see: [www.keysight.com/find/repairandcal](http://www.keysight.com/find/repairandcal)

### Global Warranty Information:

All Keysight instruments are warranted individually. There is no PD1000A system warranty.

### Contact Keysight

For more information on Keysight Technologies' products, applications or services, please contact your local Keysight office. The complete list of offices is available at: [www.keysight.com/find/contactus](http://www.keysight.com/find/contactus)

If you have feedback or need help using these Keysight products, contact Keysight Technical Support:

**Support, Manuals, & Downloads:**  
[www.keysight.com/find/support](http://www.keysight.com/find/support)

**Phone Support:** +1 800 829 4444

**Fax:** +1 800 829-4433

**Hours:** 8:00am - 8:00pm ET, Mon - Fri

### Additional Resources

**IO Libraries Suite** is a collection of libraries and utilities that enable you to connect your instruments to the host controller and run programs on the host controller. The IO Libraries Suite is used with all Keysight instruments.

You can download the latest version of IO Libraries Suite from: [www.keysight.com/find/iosuite](http://www.keysight.com/find/iosuite).

**Command Expert software:** is FREE (optional) software that provides fast and easy instrument control for the PC. Command Expert combines instrument command sets, command sequences, documentation, syntax checking, and command execution in one simple interface. Download it from: [www.keysight.com/find/CommandExpert](http://www.keysight.com/find/CommandExpert)

For the InTEST Hot Plate and Controller:  
[www.intestthermal.com](http://www.intestthermal.com)

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[www.keysight.com](http://www.keysight.com)