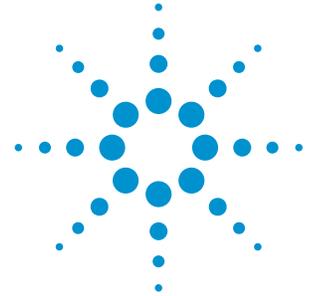# Agilent U2700A Series USB Modular Instruments

Make bench-quality measurements with space-saving, affordable modules

Roughly the size of a paperback book, Agilent USB modular instruments make it easy to perform essential measurements – waveforms, voltage, current, resistance, and more and inject standard or arbitrary waveforms into the systems or devices you're testing.

The familiar front panels are on your laptop screen: With the companion Agilent Measurement Manager software, you'll be ready for measurements at a customer site, an outsourced manufacturing operation, and beyond.

With USB 2.0 connectivity and plug-and-play simplicity, you can carry bench-quality measurements alongside a laptop PC in your bag.

What's more, each device can be mounted in the six-slot U2781A USB modular chassis with other modules for modular operations. The chassis enables synchronization of all slotted modules through master/slave triggering capabilities.

U2701A/U2702A USB modular two-channel oscilloscopes
• Bandwidth of 100 MHz (U2701A) or 200 MHz (U2702A)
• 500 MSa/s sampling and 16 Mpts of memory
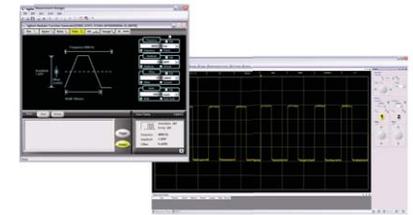• Advanced triggering including edge, pulse width and line-selectable video

U2761A USB modular one-channel function generator
• 20 MHz Sine and Square waveforms
• Pulse, ramp, triangle, noise and DC waveforms
• AM, FM, PM, ASK, FSK and PSK signals
• 64 Kpt arbitrary waveforms with 14-bit resolution up to 200 kHz
• Optional arbitrary waveform generation upgrade (2 MHz)

U2741A USB modular digital multimeter
• Broad set of features and functions with 5½-digit resolution
• DC and true-RMS AC voltage/current, two- and four-wire resistance, frequency, diode test, continuity and temperature
• Fast measurements with up to 100 readings/second

Agilent Measurement Manager (AMM) Highlights:
• AMM software provides a friendly interface for modular instruments
• Control instruments through individual windows that provide a familiar interface
• Configure instruments and measurements quickly and easily

U2722A/U2723A USB modular source measure unit
• Four quadrant source measure operation of ± 20 V/± 120 mA per channel
• 100 pA measurement with 16-bit resolution
• Embedded test script (for U2723A)
• IV Curve application support in Agilent Measurement Manager software (for U2723A)

U2751A USB modular switch matrix (32-channel, 4x8 2-wire)
• 32 two-wire crosspoints in a flexible 4x8 configuration
• Minimal crosstalk and insertion loss at 45 MHz
• Convenient user interface

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Quick Fact Sheet

USB modular two-channel oscilloscopes

Model	Description
U2701A [1]	100 MHz USB modular oscilloscope
U2702A [2]	200 MHz USB modular oscilloscope

Option and accessories

Model	Description
U2921A-100	BNC cable 1.2 m
U2921A-101	USB secure cable 2 m
10070C	1:1, 20 MHz passive probe
N2862A	10:1 passive probe 150 MHz 1.2 m (for U2701A)
N2863A	10:1 passive probe 300 MHz 1.2 m (for U2702A)

1. Includes 2 x N2862A 10:1 passive probe 150 MHz 1.2 m
2. Includes 2 x N2863A 10:1 passive probe 300 MHz 1.2 m

USB modular one-channel function generator

Model	Description
U2761A	USB modular function generator

Option and accessories

Model	Description
U2921A-100	BNC cable 1.2 m
U2921A-101	USB secure cable, 2 m
U2010A	Arbitrary waveform generation upgrade to 2 MHz
U2010A-1FP	Arbitrary waveform generation upgrade bundle purchase with U2761A

USB modular digital multimeter

Model	Description
U2741A [3]	USB modular DMM

Option and accessories

Model	Description
U2921A-101	USB secure cable, 2 m
34138A	Test lead set

3. Includes 34138A test lead set

USB modular source measure unit

Model	Description
U2722A	USB modular source measure unit
U2723A	USB modular source measure unit

Option and accessories

Model	Description
U2941A (standalone)	Parametric test fixture
U2942A	Parametric Measurement Manager Pro
U2921A-101	USB secure cable, 2 m

USB modular switch matrix

Model	Description
U2751A	USB modular switch matrix

Option and accessories

Model	Description
U2922A-201	Terminal block
U2921A-101	USB secure cable, 2 m

Ordering Information

All products include:
- 12 V, 2 A AC/DC adapter and power cord
- USB standard-A to Mini-B interface cable
- L-mount kit (for modular instrument chassis)
- Agilent Automation-Ready CD (contains Agilent IO Libraries Suite)
- Agilent USB Modular Products Quick Start Guide and reference CD-ROM
- AMM Quick Reference Card
- Certificate of calibration

Recommended service options

Additional two years of Return-to-Agilent warranty
Additional two years of Return-to-Agilent calibrations
For more information go to **www.agilent.com/find/removealldoubt**

System Requirements

Agilent Measurement Manager software

Hardware requirements
- **Processor** 1.6 GHz Pentium® IV or higher
- **Operating system** One of the following Microsoft® Windows® versions:
  - ◦ Windows XP Professional or Home Edition, Service Pack 1 or later
  - ◦ Windows Vista 32-bit (Business, Ultimate, Enterprise, Home Basic, and Home Premium Edition)
  - ◦ Windows 7 32-bit (Professional, Ultimate, Enterprise, Home Basic, and Home Premium Edition)
  - ◦ Windows 7 (64-bit) support for 32-bit application running on a WOW64 (Windows-on-Windows 64-bit) emulator
- **Hard disk space** 1GB
- **RAM** 512 MB or higher recommended
- **Video** Super VGA (800 x 600) 256 colors or more

Software requirements
- Agilent IO Libraries Suite 15.0 or higher [4]
- Agilent T&M Toolkit Runtime version 2.1 [5]
- Agilent T&M Toolkit Redistributable Package 2.1 patch [5]
- Microsoft® .NET Framework version 2.0 [5]

4. Available on the Agilent Automation-Ready CD-ROM.
5. Bundled with Agilent Measurement Manager software application installer.

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