Product Fact Sheet

Keysight U2040 X–Series Wide Dynamic Range Power Sensors

Keysight U2040 X-Series wide dynamic range power sensors offer accurate and repeatable power measurement for any modulated signal. This series comprises five models - four USB-based models and one LAN-based model – and covers a range of −70 to +26 dBm. The U2049XA, the world's first thermal vacuum compliant (TVAC) LAN-based sensor [1], is suitable for distances up to 100 meters and comes with best-in-class long term drift performance.

1. Connected to Power over Ethernet (PoE) ports, which can be used to supply the DC power required to power up the sensor and to transfer data.

Key features and benefits

– World's widest dynamic range (−70 to +26 dBm) for small signal measurements in wireless chipset and payload testing
– Super-fast measurement speed (10,000 readings/sec) enables higher manufacturing throughput
– Real-time measurement with zero dead time to ensure every single continuous pulse is measured
– Smooth Aperture function allows full dynamic range for average and time selectivity average power measurements
– Internal zero and automatic calibration saves time and reduces measurement uncertainty

BenchVue software

– Intuitive software is bundled for free with each U2040 X-Series power sensor
– Easy measurement start-up upon connection of hardware and launching of software
– Faster setup with built-in radar and wireless presets

For more information the U2040 X-Series, visit:
www.keysight.com/find/widedynamicsensor

Standard shipped items

– Sensor cable
  – USB cable: 5 ft (1.5 m), default cable length [2]
  – LAN cable: 5 ft (1.5 m), default cable length [3]
– BNC male to SMB female trigger cable, 50 Ω, 1.5 m (Quantity: 2)
– Certificate of calibration
– CD documentation
– Keysight Instrument Control Software CD (includes BenchVue software)

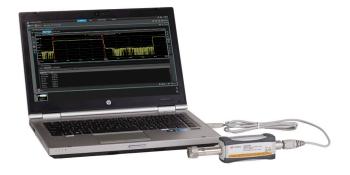2. Only applicable to U2041XA/42XA/43XA/44XA
3. Only applicable to U2049XA

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U2040 X-Series wide dynamic range sensor ordering information

Model	Description	Frequency range/ Dynamic range	Supported measurements
U2041XA	USB wide dynamic range average power sensor	10 MHz to 6 GHz / −70 to +26 dBm	Average, time- selectivity in average mode
U2042XA	USB peak and average power sensor	10 MHz to 6 GHz / −70 to +26 dBm	Peak, average, peak-to-average power, time-gated and free run mode, pulse parameters analysis, pulse profiling
U2043XA	USB wide dynamic range average power sensor	10 MHz to 18 GHz / −70 to +26 dBm	Average, time- selectivity in average mode
U2044XA	USB peak and average power sensor	10 MHz to 18 GHz / −70 to +26 dBm	Peak, average, peak-to-average power, time-gated and free run mode, pulse parameters analysis, pulse profiling
U2049XA (Option 100)	LAN power sensor	10 MHz to 33 GHz / −70 to +20 dBm	Peak, average, peak-to-average power, time-gated and free run mode, pulse parameters analysis, pulse profiling
U2049XA (Option TVA)	LAN power sensor (with thermal vacuum compliance)	10 MHz to 33 GHz / −70 to +20 dBm	Peak, average, peak-to-average power, time-gated and free run mode, pulse parameters analysis, pulse profiling

www.keysight.com/find/widedynamicsensor

Three-Year Warranty

www.keysight.com/find/ThreeYearWarranty

Keysight's commitment to superior product quality and lower total cost of ownership. The only test and measurement company with three-year warranty standard on all instruments, worldwide.

Keysight Assurance Plans

www.keysight.com/find/AssurancePlans

Up to five years of protection and no budgetary surprises to ensure your instruments are operating to specification so you can rely on accurate measurements.

U2041XA/42XA/43XA/44XA USB power sensors

Options	Description
Accessories	
U2000A-201	Transit case
U2000A-202	Soft carrying case
U2000A-203	Holster
U2000A-204	Soft carrying pouch
Cables (selectable during sensor purchase)	
U2000A-301/302/303	USB cable 1.5 m/ 3 m/ 5 m
Cables (ordered standalone)	
U2031A/B/C	USB cable 1.5 m [4]/ 3 m/ 5 m
U2032A	BNC male to SMB female trigger cable, 50 Ω, 1.5 m

U2049XA LAN power sensor

Options	Description
Accessories	
U2035A	U2049XA sensor casing
U2036A	TVAC sensor bracket (for option TVA only)
Standard LAN cables (selectable during sensor purchase and orderable standalone)	
U2034A/B/C/D/E/F	LAN cable 1.5 m [4]/ 3 m/ 5 m/ 15.2 m/ 30.5 m/ 61 m
TVAC LAN cables (selectable during sensor purchase and orderable standalone)	
U2037A/B/C/D/E/F	LAN cable 1.5 m [4]/ 3 m/ 5 m/ 15.2 m/ 30.5 m/ 61 m
Trigger cable	
U2032A	BNC male to SMB female trigger cable, 50 Ω, 1.5m

For all U2040 X-Series models

Options	Description
Calibration and test data	
UK6	Commercial calibration
1A7/A6J	ISO17025/ANSI Z540 compliant calibration

4. Default selection for cable length

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