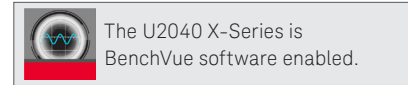


# Keysight U2040 X-Series Wide Dynamic Range Power Sensors



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 LAN-based sensor <sup>1</sup> with thermal vacuum (TVAC) option, is suitable for distances up to 100 meters and comes with best-in-class long term drift performance.



## 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 (50,000 readings/sec) enables higher manufacturing throughput
- Real-time measurement with zero dead time to ensure every single continuous pulse is measured
- Average mode time selectivity feature allows the sensor to measure average and time selectivity average power measurements across the full 96 dB range
- Internal zero and automatic calibration saves time and reduces measurement uncertainty

## BenchVue software

- Easy measurement start-up upon connection of hardware and launching of software
- Faster setup with built-in radar and wireless presets

## Standard shipped items

- Sensor cable
  - USB cable: 5 ft (1.5 m), default cable length <sup>2</sup>
  - LAN cable: 5 ft (1.5 m), default cable length <sup>3</sup>
- BNC male to SMB female trigger cable, 50 Ω, 1.5 m (Quantity: 2)
- Thermal interface material <sup>4</sup>
- Certificate of calibration
- CD documentation
- Keysight Instrument Control DVD (contains IO Libraries Suite, Command Expert and BenchVue software platform-30-day free trial of BenchVue Power Meter/Sensor Control and Analysis app)

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.  
 2. Only applicable to U2041XA/42XA/43XA/44XA  
 3. Only applicable to U2049XA  
 4. Only applicable to U2049XA (Option TVA)

For more information the U2040 X-Series, visit:  
[www.keysight.com/find/widedynamicsensor](http://www.keysight.com/find/widedynamicsensor)



## U2040 X-Series wide dynamic range sensor ordering information

Model	Description	Frequency range/ Power 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 6/33 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 option)	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](http://www.keysight.com/find/widedynamicsensor)



### Three-Year Warranty

[www.keysight.com/find/ThreeYearWarranty](http://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](http://www.keysight.com/find/AssurancePlans)

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

## U2049XA LAN power sensor

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

## For all U2040 X-Series models

Options	Description
<b>Calibration and test data</b>	
UK6	Commercial calibration
<b>Optional software</b>	
BV0007B	BenchVue Power Meter/Sensor Control and Analysis app license

4. Default selection for cable length