

# Keysight X8711A IoT Device Functional Test Solution

For Real-world Ready IoT Devices

## Limitations of Current IoT Test Solutions

If you manufacture IoT devices, testing is essential to avoid product failures or recalls that could damage your brand.



The golden radio solution is very cost effective, but the test coverage is very limited and you may miss critical defects. You will not know the true performance of the wireless connectivity of your device-under-test (DUT).



On the other hand, you can use a comprehensive tester to perform parametric test, but this means that you are paying for capabilities which you don't need.

## Now you can confidently and affordably catch defects

The Keysight X8711A IoT device functional test solution is an over-the-air signaling tester that enables you to test your IoT device's transmitter and receiver easily and effectively. **It is as simple as placing your device into a shield box and running the X8711A's test plans to get the transmitter and receiver test results in seconds!**

This solution supports *Bluetooth*® Low Energy 4.2, WLAN b/g/n, *Bluetooth* 5\*, Zigbee Pro\* and Zigbee 3.0\* radio formats.

Key Benefits	How the X8711A does it?
<b>Test IoT devices in actual operation mode and in its final form</b>	Setup is simple, no chipset control nor wired connections are necessary
<b>Assure device quality and reduce risk of field failures</b>	Objectively measures key transmitter and receiver parameters with quantitative measurements
<b>Maximize manufacturing throughput and accelerate time to market</b>	Completes transmit (Tx) power and receiver (Rx) PER in seconds
<b>Simplify test development with ready-to-use measurement suites</b>	Provides a simple interface to enable testing quickly without needing to spend time writing test software



### \*X8711A Tailored Configurations

Keysight designs tailored IoT device test solutions suited to your application. Some of the tailored solutions include:

- Bluetooth 5
- Zigbee Pro/3.0

To discuss on your requirements, please contact your local Keysight representative.




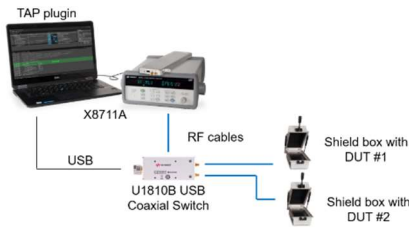
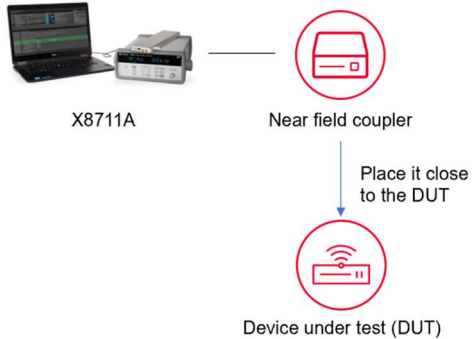
## X8711A Characteristics

Radio	Bluetooth LE 4.2	WLAN b/g/n
<b>Input power measurement (DUT transmit power)</b>	Range: 10 to -30 dBm Accuracy: $\pm 2$ dB (spec)	Range: 10 to -30 dBm Accuracy: $\pm 2$ dB (spec)
<b>Downlink power adjustment (Receiver sensitivity)</b>	Range: -40 to -75 dBm Resolution: 0.5 dB Accuracy: $\pm 2$ dB (spec)  Range: -75 to -100 dBm Accuracy: $\pm 2.5$ dB (spec)	Range: -33 to -70 dBm Resolution: 0.5 dB Accuracy: $\pm 2$ dB (spec)

All specifications are specified at operating temperature of  $23\text{ }^{\circ}\text{C} \pm 5\text{ }^{\circ}\text{C}$  and are referenced to the RFIO port.

## Accessories

We offer the following options to suit your testing needs:

X8751A RF Shield Enclosure Kit	X8753A Multi-Up Configuration	Near field coupler
		
<ul style="list-style-type: none"> <li>• Suitable for small device under tests.</li> <li>• Includes I/O module, antenna coupler, grid fixture and RF cable</li> </ul> <p>*Not available in Europe</p>	<ul style="list-style-type: none"> <li>• For high volume manufacturing</li> <li>• One measurement system is shared with 2 devices under test (DUTs) for sequential testing.</li> <li>• More configurations are available. Contact Keysight to discuss on your needs.</li> </ul>	<ul style="list-style-type: none"> <li>• Suitable for big appliances</li> <li>• Innovative antenna setup design with good signal directivity in the front and sufficient shielding from the back and side</li> <li>• To purchase, please contact Keysight.</li> </ul>

For more information, please visit [www.keysight.com/find/X8711A](http://www.keysight.com/find/X8711A).

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