Power Tolerance Test Solution

Keysight Technologies and Rflight

Verify the performance of passive components under peak power conditions

With the continuing expansion of telecommunications capacity, passive components have become a key factor in achieving acceptable network performance. In multi-channel wireless transmission insufficient power capacity, especially at peak power demand, can cause devices to over-heat, early component degradation and electrical arcing that can result in an elevated noise floor and system interference.

Power tolerance testing is used to verify the performance of components under peak power input signal. It is used to verify the maximum tolerance of a component to withstand heat without degradation and arcing. Power tolerance testing is essential to characterize fully passive components used in telecommunications. These include antennas, duplexers, combiners and cables.

Peak power performance is assessed by measuring the RF VSWR (Voltage Standing Wave Ratio) from a power amplifier to the device under test (DUT). The Rflight NTSPPA-XXXX100001000 Power Tolerance Test System utilizes the Keysight X-series signal sources and spectrum analyzers. The system comes with fully integrated software, which allows it to detect VSWR changes using the Keysight N1912A dual channel power meter.

The output average power rate is 750W, with peak power 2800W. If required, the system can also be configured to provide output average power of 1000W with peak power 10000W. The system has multiple protect functions and provides excellent stability, low power consumption and easy operation. It also allows flexible configuration and upgrade.

- Can be used for frequency bands: DD800, CDMA800, EGSM900, DCS1800, PCS1900, WCDMA2100, LTE2600 etc.
- Test port power detected through Keysight E4417A power meter
- Average power: min +40dBm to max +60dBm (1000W)
- Peak power: min +40dBm to max +70dBm (10000W)
- Peak power tolerance testing through detection of VSWR deterioration
- Uses Keysight N1912A power meter and E-series spectrum analyzer and signal source

KEYSIGHT TECHNOLOGIES

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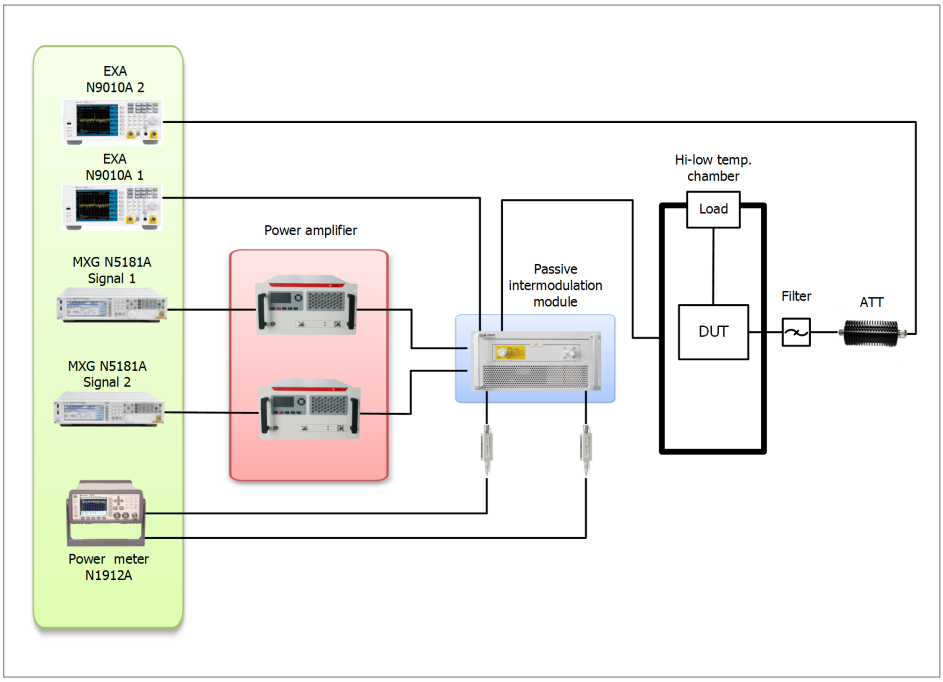

To learn how this solution can address your specific needs please contact Keysight's solutions partner, Rflight
www.keysight.com/find/rflight

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Keysight & Solutions Partners
Extending our solutions to meet your needs

Keysight and its Solutions Partners work together to help customers meet their unique challenges, in design, manufacturing, installation or support. To learn more about the program, our partners and solutions go to
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System Components

Keysight Technologies	
N1912A	P Series Dual Channel Power Meter
E9323A	E-Series Peak and Average Power Sensor
	X-Series Signal Generators
	X-Series Signal Analysers

RFlight	
NTSPPA-0610100001000	698-960MHz Power Amplifier
NTSPPA-1822100001000	1800-2200MHz Power Amplifier
NTSPPA-2327100001000	2300-2700MHz Power Amplifier
NTDPDT-1	Multi-function signal/power control unit

Rflight Communication Electronics Co., Ltd. is a high-tech enterprise specialized in the research and development, manufacturing and system solution of RF power amplifier and intermodulation system. Its application field includes national defense, electromagnetic compatibility, space exploration, high-energy physics, wireless communication, measurement and detection, medical device and others.
http://en.rflight.cn/

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