

# RF Module Test

Keysight Technologies and  
Eljay Microwave

## Achieve speed, accuracy and performance in your RF module testing

RF modules used in applications such as satellite arrays, point-to-point radios, multi-function MMIC's and radar T/R modules are increasing in complexity and demanding ever-greater bandwidths and transmission speeds. RF device manufacturers must deliver cost-effective components as quickly as possible while still maintaining the highest quality and performance. Effective RF module testing requires high performance testing combined with high throughput to meet the volume expectations of customers

The Eljay CTS-4 multi-state RF module test platform provides the combination of speed, accuracy and performance that RF device manufacturers require.

At the heart of the system is a range of Keysight instruments. The Eljay CTS-4 includes a Keysight PNA-X network analyzer, a PXA signal analyzer, a DSOS054A Infiniium S-Series oscilloscope and an N6700B modular power supply. This system configuration gives high performance and fast measurement speed across a frequency range of 10 MHz to 50 GHz.

The Keysight equipment is fully integrated into a main-frame with additional instrumentation and sophisticated DUT control.

- RF module testing solution
- Combines speed, accuracy and performance
- CW and pulsed RF measurements from 10 MHz to 50 GHz
- Based on Keysight instruments
- Includes PNA-X network and PXA signal analyzers
- Eljay WIDE (Wizard-based Integrated Development Environment)
- High performance, high throughput RF module testing



## RF Module Test

The test system is controlled by Eljay's Wizard based Integrated Development Environment (WIDE). The WIDE software includes intuitive measurement and control wizards that allow users to quickly and accurately build C# (C Sharp) test scripts. These scripts can be executed inside of WIDE or as standalone scripts. The power of a scripting approach can be found in its flexibility. Measurements not foreseen today can be added quickly and easily tomorrow by editing the scripts directly.

The Eljay CTS-4 can make CW and pulsed microwave measurements on both linear and frequency translation devices. These include S-parameters, gain, efficiency, harmonics, spurious signals, RF pulse profile, noise figure and many others. This performance, together with its flexible configuration and high throughput, means the system is the ideal solution for testing today's complex RF modules and devices.

With the Eljay CTS-4 multi-state RF module test platform based on Keysight instrumentation, you no longer have to compromise. You can now qualify your RF devices with the speed, accuracy, and performance demanded by your customers.

### System Components

(Typical CTS-4 configured system, 10 MHz to 50 GHz)

#### Keysight Technologies

N5242A	PNA-X microwave network analyzer
N9030A	PXA signal analyzer
DSOS054A	Infiniium S-Series oscilloscope
N6700B	Modular power supply (plug-in modules as required)

#### Eljay Microwave

E30002	4-port non-blocking switch matrix, 10 MHz to 50 GHz
E7100-001	Trigger sync
	Software and integration services provided by Eljay Microwave Other system configurations are available

To learn how this solution can address your specific needs please contact

Keysight's solutions partner,  
Eljay Microwave  
[www.keysight.com/find/eljay](http://www.keysight.com/find/eljay)



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Eljay Microwave is a recognized international leader in modeling, measurement and design of RF, microwave and millimeterwave technologies.

[www.eljajmicrowave.com](http://www.eljajmicrowave.com)

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