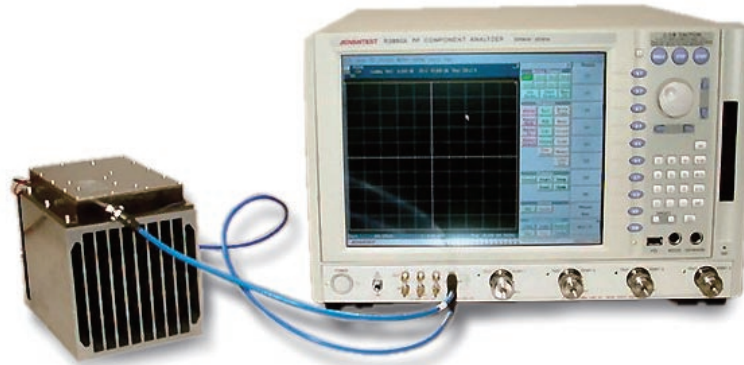


For Switch Module High-Power and Power Amplifier S-Parameter Measurement



Overview

There is high demand for high-power measurement of built-in front-end devices in cellular phones such as filters, switch modules that harmonic distortion can be measured at the time of actual power application. However, S-parameter measurement is not possible by simply hooking up an amplifier and an attenuator to a conventional network analyzer.

The external power amplifier port option for the R3860A/3768/3770 is ideally suited for testing power amplifiers, GaAs switches, and other such devices that require high-power measurement. In high-power measurement, S-parameter can be measured by plugging an amplifier or attenuator into an additional connector. Also, with an attenuator added to the additional connector, the option can measure S-parameters of power amplifiers whose output is amplified by the DUT itself.

Features

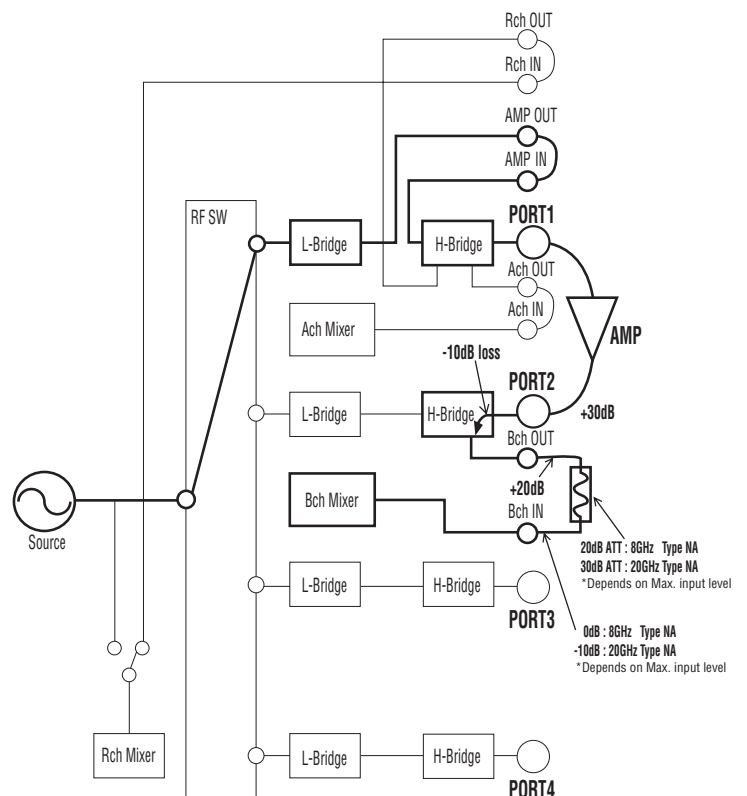
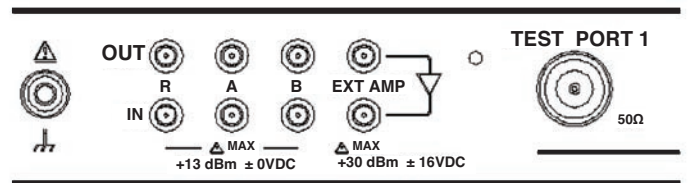
- With a properly rated attenuator added to the mixer direct port, the option measures S-parameters (up to 1 W) of power amplifiers in full 2-port calibration tasks.
- Devices requiring high-power measurement can be tested when an external power amplifier is connected to the external amplifier port.

Performance

- Maximum ratings
 EXT AMP Port : +30 dBm ±16 VDC MAX
 R,A,Bch : +13 dBm ±0 VDC MAX
- High-power output is limited to port 1 only.

Supported Models

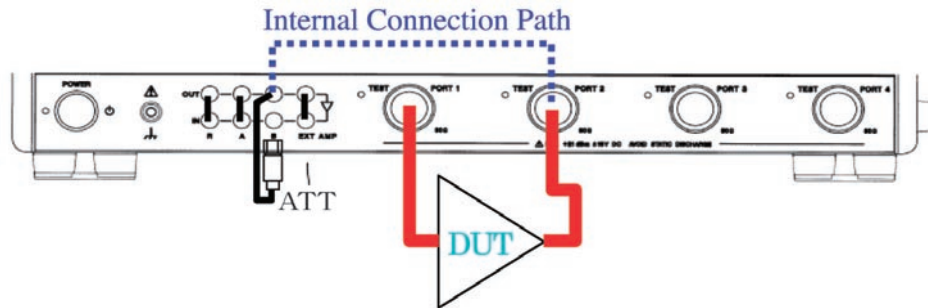
R3860A/3768/3770 3/4port models



Internal Block Diagram

■ Measurement Example (Connection)

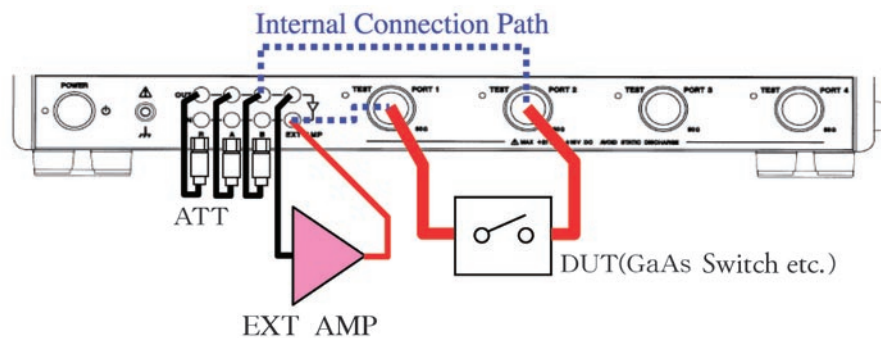
Power AMP Measurement



- R, A, EXT AMP port-through connection
- ATT connected to port B
(8 GHz model: 20 dB, 20 GHz model: 30 dB, Depends on the maximum input level of the analyzer)
- Full 2-port calibration between ports 1 and 2
- DUT (AMP) located between ports 1 and 2 for measurement

Note: High-power input is limited to ports 1 and 2 only.

High-Power Device Measurement



- External amplifier connected to the EXT AMP port for high-power measurement of the DUT
- ATT connected to ports R, A and B
(8 GHz model: 20 dB, 20 GHz model: 30 dB, Depends on the maximum input level of the analyzer)

Note: High-power output is available only from port 1, and high-power input is available only from ports 1 and 2.

Please be sure to read the User's Manual thoroughly before using the product.

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