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Data Sheet

August 13, 2026

KEITHLEY

Keithley 2810 RF Vector Signal Generator 400 MHz to 2.5 GHz

Keithley 2810 RF Vector Signal Analyzer with Spectrum Analyzer 400 MHz to 2.5 GHz The 2810 combines vector signal analysis and FFT spectrum analysis from 400 MHz to 2.5 GHz with 0.1 Hz frequency resolution. Modulation measurement bandwidth is greater than 30 MHz (3 dB IF). Optional personalities cover GSM/GPRS/EDGE, cdma2000 reverse link, and WCDMA uplink. Absolute amplitude accuracy is ± 0.6 dB (400 MHz to 2 GHz) and ± 0.7 dB (2 to 2.5 GHz). A built-in fixed-output tracking/generator covers the same band. Ethernet, USB, GPIB, LXI Class C. The 2810 combines vector signal analysis and FFT spectrum analysis from 400 MHz to 2.5 GHz with 0.1 Hz frequency resolution. Modulation measurement bandwidth is greater than 30 MHz (3 dB IF). Optional personalities cover GSM/GPRS/EDGE, cdma2000 reverse link, and WCDMA uplink. Absolute amplitude accuracy is ± 0.6 dB (400 MHz to 2 GHz) and ± 0.7 dB (2 to 2.5 GHz). A built-in fixed-output tracking/generator covers the same band. Ethernet, USB, GPIB, LXI Class C. Handset TX calibration and modulation quality; 802.11b/g and Bluetooth; RFIC; adjacent-channel power; pairing with 2910 VSG and 2602 SMU for RF+DC in 4U; R&D spectrum work with 2 Hz to 3 MHz RBW.



MODEL

Keithley 2810

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

2810

LISTING

<https://aumictechlabs.com/products/2810-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Keithley 2810 RF Vector Signal Generator operates from 400 MHz to 2.5 GHz and delivers complex RF signal generation for wireless device testing and RF component characterization. Built on software-defined radio architecture with a 500 MHz digital signal processor, this instrument provides precise control over signal parameters with modulation bandwidth exceeding 30 MHz. The 2810 pairs directly with the Keithley 2810 RF Vector Signal Analyzer to enable comprehensive RF testing workflows. Technical Specifications Frequency Range: 400 MHz to 2.5 GHz Modulation Bandwidth: >30 MHz Amplitude Range: -120 dBm to +30 dBm Channel Power Accuracy: ± 0.6 dB (modulated mobile phone signals) Reference Output: 10 MHz, +7 dBm ± 3 dB (characteristic) Impedance: 50 Ω (characteristic) Resolution Bandwidth: Narrow bandwidths supported across wide frequency spans; 200 MHz span with 100 Hz resolution achievable in ~15 seconds Sweep Time: 15-second sweep displaying 200 MHz spectrum at 100 Hz resolution bandwidth Key Features GSM/GPRS/EDGE, cdma2000 1xRTT, and WCDMA signal analysis personalities cdma2000 Reverse Link analysis: 1.23 MHz spread spectrum with channel power, frequency error, rho, adjacent channel power, code domain power, occupied bandwidth, and spurious emissions measurements WCDMA Uplink analysis: EVM and peak code domain error on 3.84 MHz WCDMA transmitter signals IEEE-488 (GPIB), USB, and LAN interfaces with LXI-C compliance High data transfer rates via USB and LAN Compact 3U half-rack form factor with optional bumpers and handle for bench-top configurations Intuitive LCD graphical user interface Typical Applications Accelerated production testing, R&D signal development, wireless device characterization, and RF component validation across 400 MHz to 2.5 GHz bands. Compatibility & Integration Designed to integrate with the Keithley 2810 RF Vector Signal Analyzer and Model 2910 RF Vector Signal Generator in multi-instrument test systems.

Features & description

From manufacturer datasheet

Features

- FFT architecture for fast narrow-RBW sweeps (200 MHz span at 100 Hz RBW in 15 s class)

2810 Characteristics / Specifications

PARAMETER	VALUE
Model	2810
Manufacturer	Keithley Instruments
Instrument Type	RF vector signal analyzer with spectrum analyzer
Alias	2810; 2810-F; 2810-R; 2810-FRK; 2810-RRK
Frequency range	400 MHz to 2.5 GHz
Frequency settling resolution	0.1 Hz
Internal reference aging	≤1 ppm/year
Reference output	10 MHz, +7 dBm ±3 dB characteristic, 50 ohm
External reference input	1 to 20 MHz, 0 to +15 dBm lock range
Frequency span	200 Hz to 2.1 GHz plus zero span
Zero span sweep	1 us to 0.5 s
IF bandwidth 3 dB	greater than 30 MHz
IF flatness 20 MHz	±1.0 dB typical
Resolution bandwidth ENBW	2 Hz to 3 MHz, 1 Hz resolution
Reference level range	+40 dBm to -170 dBm
Maximum safe input power	+35 dBm
Maximum safe DC	±50 V DC
Absolute accuracy 400 MHz to 2 GHz	±0.6 dB specified, ±0.3 dB typical
Absolute accuracy 2 GHz to 2.5 GHz	±0.7 dB specified, ±0.4 dB typical
Ref level accuracy plus 10 to minus 70 dBm	±0.2 dB
Displayed average noise preamp off	-141 dBm/Hz
Displayed average noise preamp on	-148 dBm/Hz
VSWR	1.4:1
Phase noise 1 GHz 20 kHz offset	≤ -115 dBc/Hz
TOI typical	+30 dBm

PARAMETER	VALUE
Generator frequency	400 MHz to 2.5 GHz
Generator amplitude	-10 dBm $\pm$ 3.5 dB (typical $\pm$ 3 dB)
Generator sweep points	1 to 501
Interfaces	Ethernet, USB, GPIB
LXI	ClassC Options: 2810-GSM, 2810-cdma2000, 2810-WCDMA
Companion generator	Model 2910 Notes Specs from Keithley 2810 RF vector signal analyzer data sheet. Confirm RF connector front versus rear and installed demod personalities. Over-range outside 400 MHz to 2.5 GHz is not specified.
Bandwidth	is greater than 30 MHz (3 dB IF). Optional personalities cover GSM/GPRS/EDGE, cdma2000 reverse link, and WCDMA uplink. Absolute amplitude accuracy is $\pm$ 0.6 dB (400 MHz to 2 GHz) and $\pm$ 0.7 dB (2 to 2.5 GHz). A built-in fixed-output tracking/generator co

Full OEM specifications

Complete technical content extracted from the manufacturer datasheet. Sparse OEM tables are reconstructed as tables below; other text is preserved as paragraphs.

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Ref level accuracy plus 10 to minus 70 dBm: ±0.2 dB

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Interfaces	Ethernet, USB, GPIB

LXI: ClassC Options: 2810-GSM, 2810-cdma2000, 2810-WCDMA

Companion generator: Model 2910

Notes

Specs from Keithley 2810 RF vector signal analyzer data sheet. Confirm RF connector front versus rear and installed demod personalities. Over-range outside 400 MHz to 2.5 GHz is not specified.

Available from Aumictech

Used and refurbished unit evaluated in-house. Calibration: Available on request. Used · In stock.

Request a quote: sales@aumictech.com · +1 (484) 841-9341

Aumictech

788 S 500 E, Pleasant Grove, UT 84062
sales@aumictech.com · +1 (484) 841-9341
<https://aumictechlabs.com>

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Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.