Spectrum Analyzers

2711 • 2712

Features & Benefits

2711

- Economical, Can Be Configured to Meet Most Budgets
- High Portability
- Internal or External Tracking-Generator Option
- Internal Frequency Counter (Opt. 02)
- GPIB or RS-232 Interface Option
- Excellent Frequency Accuracy and Sensitivity
- 3-Control Operation for Most Measurements
- UL Listed 1244, CSA Bulletin 556B

2712

- High Value, Low Cost
- 5×10^{-7} Frequency Accuracy
- Sensitivity to -139 dBm (-92 dBmV) with Built-In Preamp
- Internal Frequency Counter
- 4-Trace Digital Plus True-Analog Display
- 124 K of RAM
- Easy to Use
- Dedicated Numeric Keypad Plus Logically-Grouped Menu Keys
- Powerful Built-In Measurement Routines
- EMC Measurements with Optional Quasi-Peak Detector
- Swept Measurements to 1.8 GHz with Optional Internal or External Tracking Generator
- UL Listed 1244, Certified CSA C22.2 No. 231-M89

Applications

- Broadcast Transmitter Performance
- Communications System Operations
- EMC Prequalification Testing

2712 Spectrum Analyzer

The Tektronix 2712 Spectrum Analyzer provides excellent RF performance, a built-in frequency counter, full programmability, digital and true-analog displays, high portability, enough nonvolatile memory for 108 saved displays, and much more.

A straightforward human interface, with conveniently grouped, dedicated front-panel keys

and simple, menu-driven functions makes the 2712 easy to learn and use. You can set frequency, span, and reference level directly from the front panel. A real-time clock provides an on-screen date and time display, plus date/time stamp capability for waveform printouts.

Frequency-corrected tuning and phase-lock stabilization enhance the ability to resolve close-in signals and reliably demodulate narrowband signals. Sensitivity up to -127 dBm (-80 dBmV) at 300-Hz resolution bandwidth (RBW) lets you see weak signals. The built-in preamp can improve sensitivity another 12 dB, up to -139 dBm (-92 dBmV). Up to 80-dB on-screen dynamic range ensures visibility of weak signals in the presence of strong ones.

A 300 Hz RBW filter with a shape factor <7:1 means you'll see many close-in sidebands and spurious or unexpected signals you might otherwise miss. At the other end of the spectrum the 5-MHz RBW filter is useful when demodulating wideband signals such as actively modulated video carriers.

The built-in signal counter, with 0.5 ppm ±10 Hz accuracy, offers added power for rapidly identifying signals. The capability to choose between digital and true-analog displays lets you examine signals for characteristics that are not visible on digital-only displays.

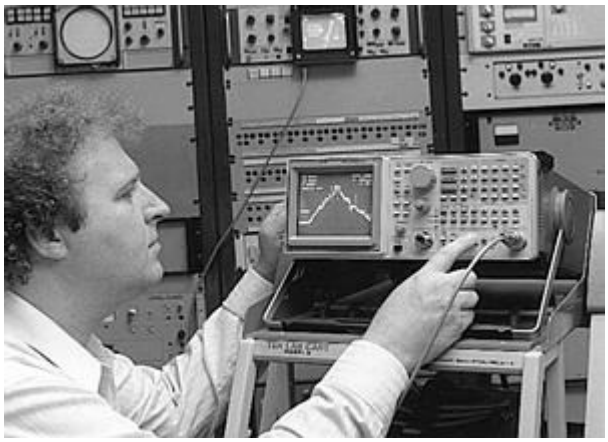
Sweep speeds of 1 µsec/div, TV Line and TV Field triggering, an internal audio amplifier, AM/FM detectors, and the optional Video Monitor Mode all make video communications measurements easier.

Bandwidth, Carrier-to-Noise, Noise Power, Signal Search, and FM Deviation modes provide additional measurement power and convenience. Occupied Bandwidth Mode, with percent settable from 1 to 99%, aids in broadcast and radio measurements.

The optional internal or external tracking generator provides high dynamic range swept measurements to 1.8 GHz.

EMC Measurement

To help simplify your EMC measurements, the 2712 offers an optional quasi-peak detector, EMI resolution bandwidth filters, and fully corrected E-field intensity measurements to assist in precertification and troubleshooting. EMC ancillary devices are available to provide a complete measurement solution.


2711

2711 Spectrum Analyzer

The 2711 offers a wide range of features at an extremely affordable price. This value leader is well-suited for checking broadcast transmitter performance and communications system operations, looking for unwanted RF emissions, testing two-way communications equipment, maintaining industrial security, and teaching frequency domain concepts in the classroom, plus a wide variety of other applications.

The standard 2711 shares many of 2712's valuable features, such as compact size and light weight (9.5 kg, about 21 lbs.). Both instruments can also be quickly converted to rack operation with optional rackmount adapters.

Frequency accuracy is 1×10^{-5} and sensitivity is up to -117 dBm (-70 dBmV) at 3 kHz RBW. The built-in preamp can add another 12 dB, up to -129 dBm (-82 dBmV). Up to 80-dB on-screen dynamic range helps see weak signals, even when strong ones are present.

True-analog display capability, along with fast sweep speeds and TV Line and TV Field triggering provide convenient demodulation of video carriers for making depth-of-modulation checks or looking at special baseband data, VITS, and many other signals.

An internal audio amplifier and AM/FM detectors let you hear demodulated signals, using either the built-in speaker or headphone jack, for fast signal identification and troubleshooting in communications applications.

With the Video Monitor (Opt. 10) installed, you can view broadcast (AM) TV signals or down-converted satellite (FM) signals.

The 2711 can also be used with a set of near-field probes as a handy EMC diagnostic tool.

Selection Guide

Capability	2712	2711
Frequency Range	9 kHz to 1.8 GHz	9 kHz to 1.8 GHz
±0.5 ppm Freq. Accuracy	Std.	NA
Signal Counter	Std.	Opt. 02

GPIB Interface	Std.	Opt. 03
Internal Tracking Gen.	Opt. 04	Opt. 04
External Tracking Gen.	Opt. 05	Opt. 05
RS-232C Interface (replaces GPIB)	Opt. 08 (no charge)	Opt. 08 (no charge)
Video Monitor Mode	Opt. 10	Opt. 10
EMC Precertification	Opt. 12	NA
Measurements		
TV Sideband	Opt. 15	Opt. 15
Adapter Interface		
Nonvolatile Memory	124 K	28 K (124 K with Opt. 03 or 08)
High Portability	Yes	Yes
Both Digital and True-Analog Displays	Yes	Yes
Dedicated Numeric Keypad	Yes	Yes
Real-Time Clock	Std.	With Opt. 03 or 08

Dimensions	**mm**	**in.**
Height	137*[3]	5.4*[3]
Width	361*[3]	14.2*[3]
Depth	445*[3]	17.5*[3]
Weight	**kg**	**lbs.**
Net	9.5*[4]	<21*[4]

CE

ISO 9001 Product(s) are manufactured in ISO registered facilities.

GPIB IEEE-488 Product(s) complies with IEEE Standard 488.1-1987, RS-232-C, and with Tektronix Standard Codes and Formats.

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