

TEKTRONIX

2711

The Tektronix 2711 is a highly portable, economical RF spectrum analyzer designed for a wide range of RF communications testing and spectrum monitoring applications. Operating over a frequency range of 9 kHz to 1.8 GHz, it features optional internal frequency counter capabilities, tracking generator options, and digital storage. With its easy-to-use three-control operation, it is optimized for both field and benchtop environments.

SPECIFICATIONS

General

Interfaces	GPIB (Option 03) or RS-232 (Option 08)
Display	Monochrome raster-scan CRT with digital storage
Warm-up Time	15 minutes

Physical

Power Supply	90 to 250 V AC, 48 to 440 Hz, 55 W typical
Operating Temperature	0°C to +50°C °C
Dimensions (W×H×D)	361 mm x 137 mm x 445 mm mm
Weight	10.4 kg kg

Frequency Specifications

Frequency Range	9 kHz to 1.8 GHz
Center Frequency Resolution	1 kHz
Frequency Reference Accuracy	±5 ppm
Frequency Span Range	0 Hz (zero span), 100 kHz to 1.8 GHz
Phase Noise	<-70 dBc/Hz at 10 kHz offset

Amplitude Specifications

Amplitude Measurement Range	-110 dBm to +20 dBm (standard), -129 dBm to +20 dBm (with Option 14 preamp & 300 Hz RBW)
Maximum Safe RF Input Power	+20 dBm continuous (0 dB attenuation), +30 dBm continuous (≥20 dB attenuation)
Maximum DC Input Voltage	100 V DC
Displayed Average Noise Level (DANL)	≤-110 dBm (3 kHz RBW, standard), ≤-129 dBm (with Option 14 preamp & 300 Hz RBW)
Frequency Response (Flatness)	±1.5 dB (9 kHz to 1.8 GHz, with 10 dB attenuation)
Input Attenuator Range	0 to 50 dB
Input Attenuator Step Size	10 dB

Resolution & Video Bandwidths (RBW/VBW)

Resolution Bandwidth (RBW) Range	3 kHz to 5 MHz (standard), 300 Hz to 5 MHz (with Option 14)
RBW Selectivity (60 dB / 3 dB Shape Factor)	<15:1 (standard), <4:1 (Option 14, 300 Hz & 10 kHz RBW)
Video Bandwidth Steps	1-10 sequence

Sweep & Triggering

Sweep Time Range	1 μ s/div to 2 s/div (Zero Span), 50 ms to 20 s total sweep time (Span Mode)
Sweep Trigger Sources	Free Run, Internal (Video), Line, External

Signal Inputs & Outputs

RF Input Connector Type	BNC female
RF Input Impedance	50 Ω (standard), 75 Ω (with Option 01)
Input VSWR	$\leq 1.5:1$ (with ≥ 10 dB attenuation, up to 1.8 GHz)
Calibrator Output Frequency	100 MHz
Calibrator Output Level	-20 dBm

Measurement Features & Interface

Number of Traces	3 (A, B, C digital storage)
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Power Specifications

DC Input Power Option	Option 07 (12 V DC / external battery)
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Physical & Environmental

Storage Temperature Range	-55°C to +75°C
Operating Humidity	Up to 95% RH (non-condensing)
Maximum Operating Altitude	4,600 m (15,000 ft)

Performance

Third-Order Intermodulation Distortion	<-70 dBc (for two -30 dBm input tones, 0 dB attenuation)
Image Rejection	<-70 dBc
IF Rejection	<-70 dBc
Reference Level Range	-70 dBm to +20 dBm
Vertical Scales	10 dB/div, 5 dB/div, 1 dB/div, Linear
Display Dynamic Range	80 dB
Residual Responses	≤ -90 dBm (with 0 dB attenuation)
Frequency Readout Accuracy	$\pm(5$ MHz + 1% of span)
Marker Amplitude Resolution	0.1 dB

Power

Power Consumption	105 W maximum
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Option 14 Tracking Generator

Tracking Generator Frequency Range	100 kHz to 1.8 GHz (with Option 14)
Tracking Generator Output Level Range	0 dBm to -48 dBm in 1 dB steps (with Option 14)
Tracking Generator Flatness	±1.5 dB (with Option 14)

Option 01 75 Ohm Input

Input Impedance (Option 01)	75 Ω (with Option 01)
RF Input Connector (Option 01)	BNC female (with Option 01)

Demodulation

Audio Demodulation	AM and FM standard, with internal speaker and front-panel headphone jack
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Memory & Storage

Stored Setups & Waveforms	Up to 9 front-panel setups and 9 waveforms stored in non-volatile memory
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Display

Display Graticule	8 x 10 divisions
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Inputs & Outputs

External Trigger Input	BNC female, TTL compatible
Headphone Jack	3.5 mm (1/8 in) mono jack

Environmental & Safety

MIL-T-28800 Class	Meets MIL-T-28800D, Type III, Class 5, Style E
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Compliance

EMC Compliance	FCC Class B, VDE 0871 Class B
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TECHNOLOGY

RF Spectrum Analysis

APPLICATIONS

RF Communications and Spectrum Analysis

Generated by SpecAtlasHub (specatlashub.com). Specifications are compiled from available sources and are subject to change — verify critical values against the manufacturer before purchase.