

## Specifications

### Frequency

Frequency Range (spectrum analysis mode)

Preamplifier off:	9 kHz to 13.5 GHz
Preamplifier on:	100 kHz to 3.3 GHz

Resolution bandwidth: 1 Hz to 10 MHz (sequences 1, and 3)

### Sweep

Sweep time

Zero span:	1 $\mu$ s to 6000 s
Span > 0 Hz:	2 ms to 2000 s

Trigger source: Free-run, Video, IF, Line, Ext 1 (TTL level), and Ext 2 (0 to +5 V)

### Amplitude

Amplitude measurement range

Preamplifier off:	+30 dBm to average display noise level
Preamplifier on:	+30 dBm to average display noise level

Maximum safety input level (input ATT.:  $\geq 10$  dB)

Average continuous power

Preamplifier off:	+30 dBm
Preamplifier on:	+13 dBm

Input ATT. range: 0 to 75 dB by 5 dB steps

Detector modes: Normal, positive peak, negative peak, sample, and average (RMS, video, and voltage)

### Amplitude accuracy

Frequency response

(input ATT.: 10 dB, and temperature range: 20 to 30°C)

Preamplifier off

50 MHz to 2.5 GHz:	$\pm 0.4$ dB
9 kHz to 3.3 GHz:	$\pm 1.0$ dB
3.3 GHz to 7.5 GHz:	$\pm 1.5$ dB
7.5 GHz to 13.5 GHz:	$\pm 2.0$ dB

### Dynamic range

Average display noise level

(input ATT.: 0 dB, and temperature range: 20 to 30°C)

Preamplifier off

10 MHz to 1 GHz:	$< -156$ dBm (typical: $-158$ dBm)
1 GHz to 2 GHz:	$< -154$ dBm (typical: $-156$ dBm)

Preamplifier on

10 MHz to 1 GHz:	$< -162$ dBm (typical: $-168$ dBm)
1 GHz to 2.5 GHz:	$< -160$ dBm (typical: $-166$ dBm)

1 dB gain compression (preamplifier off)

200 MHz to 3.3 GHz:  $> +6$  dBm (typical:  $+9$  dBm)

2nd order harmonic distortion (preamplifier off)

50 MHz to 1.65 GHz:	$< -60$ dBc (mixer level: $-20$ dBm)
720 MHz to 958 MHz:	$< -100$ dBc (mixer level: $-10$ dBm, input filter: ON)
$> 1.65$ GHz:	$< -100$ dBc (mixer level: $-10$ dBm)

3rd order intercept point (TOI) (preamplifier off)

1 GHz to 2 GHz:	$> +21$ dBm (typical: $+25$ dBm)
2 GHz to 3.3 GHz:	$> +22$ dBm (typical: $+26$ dBm)

## General specifications

Operating environment range: Ambient temperature: 0 to +50°C  
Relative humidity: 80% or less (No condensation)

Storage environment range: Ambient temperature:  $-20$  to  $+60^{\circ}\text{C}$   
Relative humidity: 80% or less (No condensation)

AC power input: 100 to 120 VAC, 50 Hz/60 Hz  
220 to 240 VAC, 50 Hz/60 Hz  
(automatic switching between 100 VAC and 220 VAC)

Power consumption: 360 VA or less  
Approx. 250 VA (excluding options)

Dimensions: Approx. 365 (W) x 177 (H) x 417 (D) mm  
(excluding protrusions, such as handles and feet)

Mass: 18 kg or less (excluding options)

## Ordering information

Main unit  
Signal analyzer: R3477

Accessories  
Power cable: A01412  
Input cable (50 $\Omega$ ): A01037-0300  
N-BNC adapter: JUG-201A/U

Option  
High stability frequency standard ( $\pm 5 \times 10^{-9}$ /day): OPT.21  
High stability frequency standard  
( $\pm 3 \times 10^{-10}$ /day,  $\pm 2 \times 10^{-8}$ /year): OPT.22  
Rubidium frequency standard ( $\pm 1 \times 10^{-10}$ /month): OPT.23  
3GPP modulation analysis software (supporting HSDPA): OPT.50  
cdma2000 modulation analysis software  
(supporting 1xEV-DV): OPT.52  
6 GHz broadband converter: OPT.71  
Tracking generator: OPT.79

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Please be sure to read the product manual thoroughly before using the products.  
Specifications may change without notification.