

RSR Frequency Counter 1.3 GHz

Part No. 01FCMS6100

Back to [Frequency Counter](#) Main Page

1. G.TIME

For frequency measurement mode, this button is used to change gate time. When period measurement mode, this button is used to change the multiplier factors. Each range is as follows:

CHANNEL A INPUT MODE

FREQUENCY RESOLUTION

Gate Time	10MHz Range Resolution	100MHz Range Resolution
0.02 Sec	00000.0kHz	000.000MHz
0.2 Sec	00000.00kHz	000.0000MHz
2 Sec	00000.000kHz	000.00000MHz

PERIOD RESOLUTION

Gate Time	Resolution
0.02 Sec	0.0 μ S
0.2 Sec	0.00 μ S
2 Sec	0.000 μ S

CHANNEL B INPUT MODE

FREQUENCY RESOLUTION

Gate Time	1300MHz Range Resolution
0.025 Sec	0000.00MHz
0.25 Sec	0000.000MHz
2.5 Sec	0000.0000MHz

2. FREQ.

For frequency measurement mode, this button is used to change frequency range. After RESET, The instrument is auto into 10MHz-frequency measurement range. This button is pushed one time; instrument is auto into 100MHz-frequency measurement range. This button is pushed one time again; instrument is auto into 1300MHz-frequency measurement range. So circle.

3. A.ATTN

Input signal attenuate button. When depress, the sensitivity is attenuated by a factor 20 for input signal.

4. L.F

Low pass filter button. When depress:

~100kHz, -3dB

~150kHz, -3dB at ATTN condition

5. A INPUT

Channel A input BNC connector.

Put a signal in to measure for 10 Hz ~100MHz frequency, period and total.

6. B INPUT

Channel B input BNC connector.

Put a signal in to measure for 100M Hz ~1300MHz frequency.

7. DISPLAY

EIGHT-DIGIT LED: Display measurement value.

GATE INDICATOR: Display the opened or closed state of the GATE. When GATE is open, indicator is lit.

OFL INDICATOR: When overflow, the indicator is lit.

1300MHz INDICATOR: When selecting the 1300MHz range, the indicator is lit.

100MHz INDICATOR: When selecting the 100MHz range, the indicator is lit.

10MHz INDICATOR: When selecting the 10MHz range, the indicator is lit.

kHz INDICATOR: The unit of frequency.

MHz INDICATOR: The unit of frequency.

μS INDICATOR: The unit of period.

Resolution and Accuracy

Frequency measurements

Channel	Range	Resolution	Accuracy
A	10MHz 10Hz to 10MHz	1,10,100Hz selectable	$\pm 1 \text{ count} \pm 1 \times 10^{-5} \times \text{frequency (month)}$ $\pm 1 \text{ count} \pm 5 \times 10^{-6} \times \text{frequency (minute)}$
	100MHz 10MHz to 100MHz	10,100, 1000Hz selectable	
B	1300MHz 100MHz to 1300MHz	100Hz,1kHz, 10kHz selectable	

Period measurements

Channel	Range	Resolution	Accuracy
A (only)	0.1S to 0.1μS (10Hz to 10MHz)	0.0μS, 0.00μS 0.000μS selectable	$\pm 1 \text{ count} \pm 1 \times 10^{-5} \times \text{period (month)}$ $\pm 1 \text{ count} \pm 5 \times 10^{-6} \times \text{period (minute)}$

Total measurements

Channel	Range	Resolution
A (only)	10Hz to 10MHz	1 count input

Input Characteristics

Channel A

Input voltage sensitivity:

10MHz range: 10Hz to 8MHz 25mV rms. 8MHz to 10MHz 50mV rms.

100MHz range: 10MHz to 80MHz 25mV rms. 80MHz to 100MHz 50mV rms.

Attenuation: $\times 1$, $\times 20$ fixed

Impedance: approx. $1M\Omega$ less than 35pF

Maximum voltage protection: 250V RMS

Channel B

Input voltage sensitivity: 20mV rms.

Impedance: approx. 50Ω

Maximum input voltage: 3V RMS