



- 10 MHz to 3 GHz
- 3 GHz, 230 MHz (2), 3 inputs (A, B, C inputs)
- 100 MHz base clock
- 1 ppm/year stability
- 10 digits display
- Math operation
- GP-IB

The SC-7200 series is a lineup of highly reliable and user friendly multi-function universal counters. The SC-7207 — the top model of the SC-7200 series — provides full capabilities, including frequency, period, time interval, pulse width, phase, frequency ratio, duty factor and event accumulation measurement, with an excellent time base specification of 1 ppm/year stability. This model is suitable for R&D, QA and production.

Specifications

Frequency C	50 MHz to 3 GHz	C input	
Measuring time	1 ms to 10s (5 steps gate), Input B	Input R	50 Ω approx.
Frequency A	10 MHz to 230 MHz (DC)	Max input voltage	+30 dBm
	10 Hz to 230 MHz (AC)	Sensitivity	-20 dBm (100 M to 300 MHz), -25 dBm (300 M to 1.5 GHz), -20 dBm (1.5 G to 3 GHz)
Measuring time	1 ms to 10s (5 steps gate), Single, Input B	Coupling	AC
Frequency Line	45 Hz to 440 Hz	Burst detect	Available
Measuring time	1 ms to 10s (5 steps gate)	Standard time base	100 MHz (Synthesized from 10 MHz)
Period A	5 ns to 100s (DC)	Temperature coefficient	±2.5 ppm (0 to +40°C)
	5 ns to 0.1s (AC)	Stability	±1 ppm/year
Measuring time	1 ms to 10s (5 steps gate), Single, Input B	Output	10 MHz CMOS Intensity modulation output
Duty A	0 to 100%	Input	10 MHz ±50 Hz
Measuring time	1 ms to 10s (5 steps gate), Single	Coupling	AC
Pulse width A	10 ns to 5s (1 ms to 10s gate)	Input R	6.4 kΩ approx.
	10 ns to 100s (Single gate)	Input voltage	1 Vrms to 5 Vrms
Measuring time	1 ms to 10s (5 steps gate), Single	Display	16 digits (10 digits data)
Frequency ratio A/B	1 x 10 ⁻¹⁰ to 1 x 10 ¹⁰	Update rate	0.1 to 200s with 0.1s resolution)
Measuring time	1 ms to 10s (5 steps gate)	Masking	1 to 9 digits
Time interval A→B	10 ns to 5s (1 ms to 10s gate)	Math	
	10 ns to 100s (Single)	Scaling	(X-a)/b, c/X, X-Xref
Measuring time	1 ms to 10s (5 steps), Single	Statistics	Max, Min, Ave, Div
Phase A→B	0 to 360 degree	Comparison	2 Threshold values
Measuring time	1 ms to 10s (5 steps gate), Single	GP-IB	Available
Total A (Accumulation)	Up to 4,294,967,295 counts	Environmental condition	
Min pulse	2.5 ns	Operating	0 to +40°C/85%RH
Measuring time	Input B, Manual	Storage	-20 to +60°C/90%RH
Peak value Vp-A, Vp-B	±2.5 V (1:1), ±50 V (20:1)	Power	
Resolution	10 mV (1:1), 100 mV (20:1)	Voltage	AC100/110 to 120/220 to 240 V
Bandwidth	150 Hz to 50 MHz	Frequency	50, 60, 400 Hz
A, B input		Consumption	36 VA max. (Included Full Option)
Input RC	1 MΩ approx. //20 pF max.	Weight	4 kg max. (Included Full Option)
Max input voltage	200 V peak	Dimensions	260(W) x 100(H) x 310(L) mm
Sensitivity	30 mVrms (DC to 230 MHz: Manual Trigger, ATT 0 dB)	Accessories	2.4 m Power cord (1), Manual (1)
	AC/DC	Options	
Coupling	AC/DC	SC-702	Comparator out/Ext trigger
Attenuator	0 dB (1:1), 26 dB (20:1)	SC-703	0.02 ppm/day and 0.1 ppm/year 10 MHz
Filter	10 kHz (on/off)	SC-704	0.002 ppm/day and 0.05 ppm/year 10 MHz
Trigger	Auto, Manual (±2.5 V)		
Slope	+/-		

Note: Only one of the SC-703 and SC-704 models is available.