6.0 GHz,with TCXO, micro SD card datalogger, Bench type

FREQUENCY COUNTER

Model : FC-6000SD ***ISO-9001, CE, IEC1010***

LUTRON ELECTRONIC

The Art of Measurement

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Model : FC-6000SD

FEATURES

* TCXO (temperature compensated crystal oscillator) time base, high stability & accuracy.
* High sensitivity for the VHF & UHF frequency measurement, useful for the CB amateur.
* Wide measuring range up to 6.0 GHz.
* Used the exclusive Microprocessor IC offered the intelligent function: Frequency, Period, Multi resolution, Data hold, Relative measurement, Data record (Max., Min., Average reading).
* 4.3 " TFT LCD .
* 0.1 Hz resolution for 10 MHz.
* LCD display for low power consumption & clear read-out even in bright ambient light condition.
* Power supply from battery or AC to DC 9V adapter.
* RS 232 PC serial interface.

General & Electrical Specifications (23 ±5 ℃)

Circuit	4.3 " TFT LCD 480 x 272 Dots.	
Measurement	Frequency, Data hold, Relative, Memory (max., min., average), Period.	
Range	6.0 GHz	500 MHz to 6000 MHz (INPUT A)
	1 GHz	10 MHz to 1 GHz.(INPUT B)
	10 MHz & Period	10 Hz to 10 MHz(INPUT C)
	Clock width&Duty	10 Hz to 100 KHz(INPUT C)
Resolution Sampling Time	Ref. the following "Table for Resolution & Sample Time".	
Sensitivity (0 dB Function)	6 GHz	≧30 mVrms(500 MHz to 6 GHz).
	1 GHz	≧30 mVrms(10 MHz to 1 GHz).
	10 MHz & Period	≧15 mV rms.(10 Hz to 10 MHz)
Max. functional signal input (Sensitivity set to -20 dB position)	6 GHz	≦300 mVrms(500 MHz to 1.5 GHz) ≦4 Vrms(1.6 GHz to 6 GHz)
	1 GHz	≦4 V rms
	10 MHz , Period ,	≦15 Vrms
	Clock width & Duty	3Vpp ~ 5 Vpp
Over-input (Max. signal will not hurt the circuit)	6.0 GHz & 1 GHz range : Max.4 V rms.	
	10 MHz & Period,Clock Width & Duty Range: Max. 15 Vrms	
Time Base Stability vs. Temp.	1 PPM (- 20 to 70 °C).	
Frequency Accuracy	± (2 PPM + 1 d) * at 23± 5 °C	
Width/Duty Accuracy	± (3 % reading + 20d) * at 23± 5 °C	
Time Base circuit	20 MHz, TCXO (temperature compensated crystal oscillator).	
Input Connector	6 GHz range : N coaxial connector.	
	1 GHz range : N coaxial connector.	
	10 MHz & Period range : BNC connector.	
Case	Durable & strong ABS-plastic housing with handle.	
Datalogger Sampling Time Setting range	Auto	1 to 3600 sec. *@ Sampling time can set to 1 second, but memory data may loss.*

Data error no.	≦ 0.1 % no. Of total saved data typically.	
Memory Card	SD memory card. 1 GB to 256 GB.	
Advanced setting	* Set clock time (Year/Month/Date,Hour/Minute/ Second) * Set sampling time * Auto power OFF management * Set beep Sound ON/OFF * Decimal point of SD card setting * SD memory card Format	
Data Hold	Freeze the display reading.	
Memory Recall	Maximum & Minimum value.	
Sampling Time of Display	Approx. 1 second.	
Data Output	RS 232/USB PC computer interface. * *Connect the optional RS232 cable UPCB-02 will get the RS232 plug.* * *Connect the optional USB cable USB-01 will get the USB plug.*	
Operating Temp.	0 to 50 °C (32 to 122 °F).	
Operating Humidity	Less than 80%.	
Power Supply	6 x 1.5 V AA (UM-3) battery (Alkaline or Heavy Duty) or AC to DC 9V Linear power adapter.	
Power Consumption (-20 dB position)	6 GHz : Approx. DC 310 mA	
	1 GHz : Approx.DC 220 mA.	
	10 MHz & Period range	
	Approx. DC 150 mA.	
AC Adapter Power Input	Optional, Linear AC to 9V DC , 800 mA rating, central positive for socket.	
Dimension	295 x 236 x 98 mm (11.6 x 9.3 x 3.9 inch).	
Weight	1465 g/3.23 LB (including battery).	
Standard Accessories	Instruction Manual ..... 1 PC.	
Optional Accessories	PB-21	Direct probe with BNC connector & alligator clip pairs, available for 10 MHz range
	BB-22	Direct probe with double BNC connector, available for 100 MHz & 10 MHz range.
	NN-23	Direct probe with double N coaxial connector, available for 1000, 6000 MHz range.
	NB-24	N coaxial connector to BNC connector adapter.
	UPCB-2	Isolated RS232 cable.
	AC-AA110V9	Linear AC to 9V DC , 800 mA rating
	AC-AA220V9	Linear AC to 9V DC , 800 mA rating

TABLE FOR RESOLUTION & SAMPLE TIME

Range	Gate Time Select	Resolution
6000 MHz (6.0 GHz)	0.5 SEC	1000 Hz
	6.5 SEC	100 Hz
	4 SEC	200 Hz
	2 SEC	500 Hz
1000 MHz (1 GHz)	1 SEC	100 Hz
	8 SEC	10 Hz
	4 SEC	20 Hz
	2 SEC	50 Hz
10 MHz	0.5 SEC	10 Hz
	1.5 SEC	1 Hz
	6 SEC	0.2 Hz
	11 SEC	0.1 Hz