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

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

FREQUENCY COUNTER

Model : FC-6000

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
	800 MHz	10 MHz to 800 MHz.
	10 MHz	10 Hz to 10 MHz
	Period	10 Hz to 10 MHz
Resolution Sampling Time	Ref. the following "Table for Resolution & Sample Time".	
Sensitivity (Sensitivity Sw. set to high position)	10 MHz & Period	30 mV rms. (10 Hz to 10 MHz)
		Typical : 15 mV rms. (10 Hz to 9 MHz)
	800 MHz	50 mV rms. (10 Hz to 100 MHz)
		Typical : 25 mV rms. (100 Hz to 800 MHz)
	6.0 GHz	50 mV rms. (100 Hz to 1 GHz)
		Typical : 10 mV rms. (1VGHz to 6 GHz)
Max. functional signal input (Sensitivity set to 20 Db position)	10 MHz & Period	15 V rms.
	800 MHz	4 V rms
	6.0 GHz	4 V rms. (400 MHz to 6.0 GHz)
Over-input (Max. signal will not hurt the circuit)	10 MHz & Period range : Max.15 V rms.	
	6.0 GHz & 100 MHz range : Max. 4 V rms.	
Time Base Stability vs. Temp.	1.5 PPM (10 to 30 °C).	
Frequency Accuracy	± (2 PPM + 1 d) 23± 5 °C, after calibration.	
Time Base circuit	20 MHz, TCXO (temperature compensated crystal oscillator).	
Input Connector	10 MHz & Period range : BNC connector.	
	800 MHz range : N coaxial connector.	
	6000 MHz : N coaxial connector.	
Case	Durable & strong ABS-plastic housing with handle.	
Datalogger Sampling Time Setting range	Auto	1,2,,5,10,30,60,120,300,600,1800,3600 sec. *@ Sampling time can set to 1 second, but memory data may loss.*
	Manual	Push the data logger button once will save data one time. *@ Set the sampling time to 0 second.* *@ Manual mode, can also select the 1 to 99 position (Location) no.*

Data error no.	≦ 0.1 % no. Of total saved data typically.	
Memory Card	SD memory card. 1 GB to 16 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 or AC to DC 9V adapter.	
Power Consumption	6000 MHz : Approx. DC 167 mA	
	800 MHz : Approx.DC 157 mA.	
	10 MHz & Period range	
	Approx. DC 90 mA.	
AC Adapter Power Input	Optional, 9V DC , 300 to 500 mA rating, central positive for socket.	
Dimension	280 x 210 x 90 mm (11.0 x 8.3 x 3.5 inch).	
Weight	1200 g/0.27 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 800, 6000 MHz range.
	NB-24	N coaxial connector to BNC connector adapter.
	UPCB-2	Isolated RS232 cable.

TABLE FOR RESOLUTION & SAMPLE TIME

Range	Gate Time Select	Resolution	Sampling Time
10 MHz	FAST	10 Hz	0.5 SEC
	SLOW	1 Hz	1.25 SEC
	SLOW (select 1)	0.2 Hz	6 SEC
	SLOW (select 2)	0.1 Hz	11 SEC
800 MHz	FAST	100 Hz	0.75 SEC
	SLOW	10 Hz	6 SEC
	SLOW (select 1)	20 Hz	5 SEC
	SLOW (select 2)	50 Hz	1.5 SEC
6000 MHz (6.0 GHz)	FAST	1000 Hz	0.5 SEC
	SLOW	100 Hz	2.75 SEC
	SLOW (select 1)	200 Hz	1.5 SEC
	SLOW (select 2)	500 Hz	0.75 SEC