

-130 dBm Average Noise Level • DTV Shoulder Mask Measurement

High Performance digital synthesizer mode

PSA-30

- Wide range frequency
- Wide input dynamic range
- Digital mobile(CDMA) Measurement
- Storage memory of large size
- Bright Color TFT-LCD(6.4")
- High-quality with reasonable price
- Various Interfaces such as USB Host and LAN
- Pre Amp as standard



9 KHZ ~ 3 GH

80.00 Ht

RARKER

PEAK

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PRESET

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194h

AMPLITUDE

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Full Digital synthesizer mode – PSA 3000, 3GHz Spectrum Analyzer of wide

PSA-3000 is digital synthesizer method Spectrum Analyzer of wide-band frequency and dynamic range. It is popular spectrum analyzer widely applicable to the mobile telecommunications (CDMA / WCDMA), RF system, broadcastings, EMI/EMC and so on. It provides various state of the art functions like 6.4 inch color TFT LCD, Centronics Printer, USB Host for data storage, CDMA measuring functions (ACP, Channel Power, Occupied bandwidth) with its reasonable prices. It can be used for education authorities for mobile telecommunications and RF, production lines for terminal and telecom equipment as well as for maintenance purposes.

Features

- · High-performance digital synthesizer method
- \cdot Wide Frequency Coverage : 9 kHz \sim 3.0 GHz
- Superior Resolution : Minimum 1 Hz
- · Compact & Portable size
- · Pre Amp as standard
- \cdot Wide Input Dynamic Range : –130 \sim 20 dBm
- · Ease-of-Use Key Buttons
- · CDMA Measurement : ACPR, ACLR, OCBW, Channel Pewer
- · Various and Convenient Interfaces : USB, LAN
- · 0.5 ppm high precision reference

■ Various and convenient interfaces ■ Remote control function



GPIB(Option), LAN(Option), RS-232C, Printer, EXT Trigger REF I/O (10 MHz)

Auto set function



Automatically displays and sets maximum signal trace



Remote controls the analyzer and manages data thru PC or Internet

Save / Recall functions



Saves and manages measurement trace and its state in the internal memory



1 High definition 640 x 480 color TFT LCD

With its high definition color TFT LCD, users rarely feel fatigues on their eyes even after long-hours of use. It provides high precision measurement as well as natural data output

② Simple and easy to use KEY

Keys are allocated for user's conveniences so that users can be easily familiar with them. And they provide various functions.

CDMA Measurement

· Channel Power (CHP) Measurement : It measures the power of mobile telecommunications channel. It screens out the

output data automatically with its simple menu operation.

· **OBW Measurement** : It measures the Occupied Bandwidth of modulation



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signal by %.

 ACP Measurement : It measures the effects on Adjacent Channel caused by transmitted power or the power rates with Adjacent Channel in Mobile Telecommunication Systems using multi channels, It checks all measured values and waveforms on one screen,





USB Interface

- Stores measured data in USB memory with USB Host supporting USB 1.1, 2.0 (GIF Format)
- Converts measured data into MS Excel by supporting CSV file format
- Supports all types of printer not only Centronics printer but USB Interface printer
- Upgrade the Firmware of Analyzer through USB by

downloading the upgraded Firmware provided in ED company website.

Internal memory of large storage capacity

- Storage capacity for waveforms: Maximum 900 waveforms
- Storage capacity for states: Maximum 3,000 states
- Easily stores waveforms and states of equipments
- according to the various application and use

CDMA Signal Generator (Option)

CDMA Signal Generator(CDMA 2000; Pilot Channel, WCDMA; 1 CPICH) has not only built-in CW Signal but also digital internal modulation signal and IQ modulator.



It can be used as a strong signal generator in overall CDMA application such as module, element test, amplifier test and AS field.

F	requency	Range	9 kHz to 3.0 GHz				
	. ,	Resolution	Minimum 1 Hz				
		Span Range	100 Hz/div to 300 MHz/div				
			1,2,5steps selection(Automatic), ZERO Span, FULL Span (9kHz to 3.0GHz)				
		Frequency Selection	Start, Stop, Center Span setup				
		Span Accuracy	±3% within a designated Span range				
		Readout Accuracy	≤±(Indicated frequency × reference frequency accuracy + span × span accuracy + 50% of RBW)				
		Phase Noise	≤ -90 dBc/Hz (based on 10 kHz Offset)				
Ā	Amplitude	Range	+20 dBm ~ -105 dBm, +20 dBm ~ -130 dBm(Pre Amp ON)				
	IHz	Average Noise Level	≤ -105 dBm 150 kHz ~ 2,7		150 kHz ~ 2.7 GHz		
		(1 kHz RBW,	\leq -127 dBm(Pre	Amp On)	Next Pk I	20 MHz ~ 2.7 GHz	
		10 Hz VBW)	≤ -100 dBm, -12	3 dBm(Pre A	Amp On)	2.7 GHz ~ 3 GHz	
			≤ -130dBm(Pre Amp On) ; Typically				
		Amplitude Unit	dBm, dBmV, dBµV, V, mV, µV, W, mW, µW				
		Display Scale	$\leq \pm 1.5$ dB / 70 dB (10 dB / div), $\leq \pm 1.5$ dB / 40 dB (5 dB / div)				
		Linearity	$\leq \pm 0.5 \text{ dB} / 8 \text{ dB} (1 \text{ dB} / \text{div}), \leq \pm 0.5 \text{ dB} / 16 \text{ dB} (2 \text{ dB} / \text{div})$				
		Frequency response	-3.5~1.5 dB(100 kHz ~ 10 MHz)				
		(Based on 0dB atten)	$\pm 1.5 \text{ dB}(10 \text{ MHz} \sim 3 \text{GHz})$				
		Reference Level	Range	20 dBm	\sim -90 dBm		
		10	Resolution	0.1 dB	Cont PK	· · · ·	
			Accuracy	+/-1.5 dE	3	10.4	
		2nd Harmonic Distortion					
		Intermodulation Distortion	\leq -70 dBc, -40 dBm input				
		Residual spurious	≤ -85 dBm (Input terminated 0dB Attenuate)				
		Other Input Spurious	\leq -60 dBc, -30 dBm input				
		Resolution Bandwidth	Selections	1kHz, 3kHz, 10kHz, 30kHz, 100kHz, 300kHz, 1MHz, 3MHz, 9kHz, 120kHz			
			Accuracy	±20%	, ,		
			Selectivity	60 dB / 3 dB ratio (15 : 1			
				60 dB / 6 dB ratio (12 : 1 (9 kHz, 120 kHz)			
			Switching Error	≤ ±1.0 c	IB (1 kHz Refere	ence RBW)	
		Video Bandwidth	10 Hz to 3 MHz in 1-3-10 step				
_	SWEEP	Rate	100 ms to 1000 sec, 40 ms to 1000 sec (Zero span)				
		Accuracy	≤ ±20%				
		Trigger Source	External(rear), Video, Freerun, Line				
		Trigger Modes	continuous, single				
		Trigger Level	TTL level				
Ī	Memery	Trace · Setup Storage	Trace Storage : Maximum 900 waveforms Setup Storage : Maximum 3000 states 6.4" color TFT LCD 640(H) x 480(V) active display area				
-	Screen	Туре					
	Display	Display Resolution					
		Marker Modes	Peak search, Delta marker, Marker to Center		r		
			Marker to Reference (8 markers maximum)				
-	Input	RF Input Connector	N type Female, 50 ohm nominal				
	·	VSWR	150 kHz ~ 3.0 GHz, VSWR (1.5 : 1 (based on 0 dBm Ref Level)				
			0 VDC +20 dBm				



Standard	Temperature Stability	± 0.5 ppm				
Frequency	Aging	± 0.5 ppm / Year				
(10MHz, Connector		BNC female				
Ref.)	Input Level	-5 dBm to +15 dBm				
	Output Level	10 MHz, +8 dBm nominal				
Interface	RS-232C	-				
	Printer	Driver	PCL Command, HP, EPSON, Laser-Jet, Desk-Jet			
	-	Connector	Standard 25 pin female D-Sub using parallel connector			
	USB Host	Printer Driver	PCL Command, HP, EPSON, Laser-Jet, Desk-Jet			
	DI DI	USB Storage Device	Supports 1.1 and 2.0, image file for storage, GIF format			
	Ethernet(Option)	10-Base-T Ethernet	Supports internet remote control			
	GPIB Interface(Option)	IEEE 488 bus				
General	Dimensions	350(W) X 195(H) X 375(D)mm				
Specifications	Weight	10 kg				
	Warming up time	20 minutes for the precision measurement				
	Power	Source Voltage and Frequency	100-240 VAC at 50/60Hz			
	S	Power Consumption	80 watts maximum without option			
PRESET	Operating Tempperature	0 °C to 40 °C				
	Storage Tempperature	-20 °C to 70 °C				
	RF Emissions, Immunity	RF emissions	EN 55011, FCC PART15 Section 15.101			
		RF Immunity	EN 61326			

PSA 300C 3GHz Spectrum Analyzer

Options

- · TRACKING GENERATOR
- · CDMA (CDMA2000, WCDMA) SIGNAL GENERATOR
- · GPIB Interface (IEEE 488 Bus)
- · ETHERNET Interface ; for Internet Remote Control
- $\cdot \, \text{SOFT} \, \text{CARRYING} \, \text{CASE}$
- · General KIT SET
- $\cdot \mbox{ CATV}$ KIT SET
- $\cdot\,\text{RETURN}$ LOSS BRIDGE KIT SET