

-130 dBm Average Noise Level • DTV Shoulder Mask measurement

Full Digital synthesizer mode

# 6.2GHz Spectrum Analyzer

## LPT-6000

- High performance digital synthesized RF
- Wide range frequency
- Wide input dynamic range
- Digital mobile(CDMA) Measurement
- Large internal memory space
- 6.4" Color TFT LCD Display
- Low Cost and High Performance
- USB Host, LAN and more Interfaces
- Pre Amp as standard

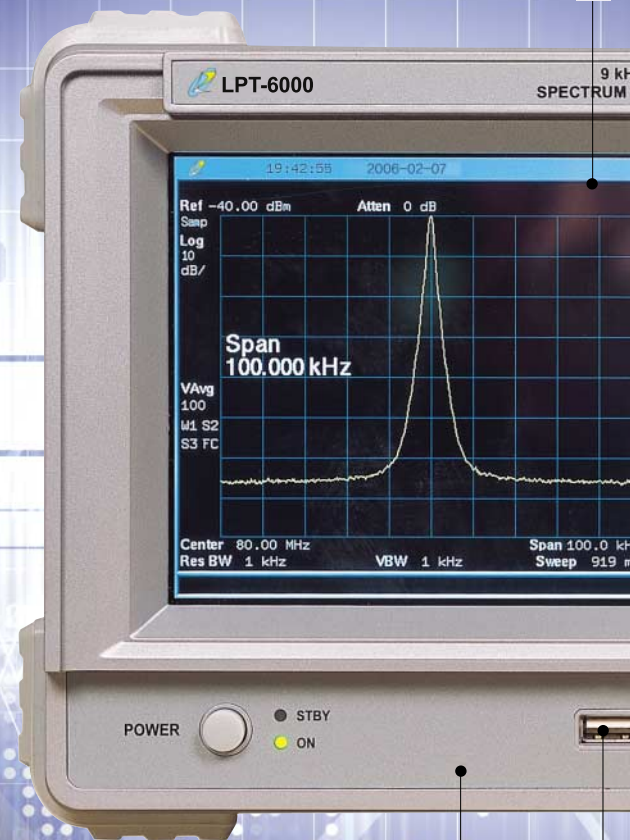
- AM/FM HD Testing & Troubleshooting
- NRSC, FCC, and iBiquity Compliance Mask
- DTV(8VSB) FCC Mask
- Spurious Emissions and Spectrum Emissions Mask
- 300 Hz RBW Filter for AM Digital
- Full Screen Display
- Save and Print Screen Shots
- Remote Operation from the Studio



## Full Digital synthesizer mode — PSA-6000, 6.2GHz Spectrum Analyzer of wide frequency and dynamic range

The Model PSA-6000 Spectrum Analyzer is a fully synthesized RF Spectrum Analyzer featuring simple user controls which allow the novice or the seasoned expert to use the PSA-6000 right out of box. The PSA-6000 provides you with a powerful RF test and measurement tool for CDMA and WCDMA RF systems, broadcast RF systems, ISM Band, wireless LAN Applications, EMI/EMC.

The features include 6.4" color display, centronics printer, internal memory, USB host, built in CDMA measurement (ACP, Channel Power and Occupied bandwidth). The PSA-6000 Spectrum Analyzer gives educational institutions, mobile and communication system manufactures and RF product service centers a quality RF test instrument at an unbelievably affordable price.



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### Features

- High-performance digital synthesizer method
- Wide Frequency Coverage : 9 kHz ~ 6.2 GHz
- Superior Resolution : Minimum 1 Hz
- Compact & Portable size
- Pre Amp as standard
- Wide Input Dynamic Range : -130 ~ 20 dBm
- Ease-of-Use Key Buttons
- CDMA Measurement : ACP, ACLR, OCBW, Channel Power
- Various and Convenient Interfaces : USB, LAN
- 0.5 ppm high precision reference

### ■ Various and convenient interfaces



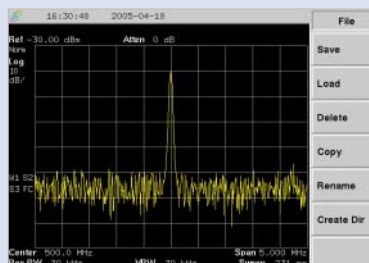
GPIB(Optional), LAN(Optional), RS-232C, Printer, EXT Trigger REF I/O (10 MHz)

### ■ Remote Control function



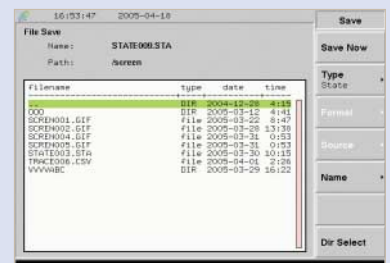
Remote controls the analyzer and manages data thru PC or Internet

### ■ Auto Set function



Automatically displays and sets maximum signal trace

### ■ Save / Recall function



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

# LPT 6000

6.2GHz Spectrum Analyzer



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## 1 High definition 640 × 480 color TFT LCD

High definition color TFT LCD enables high precision measurement and natural data display.

## 2 Simple and easy to use KEY

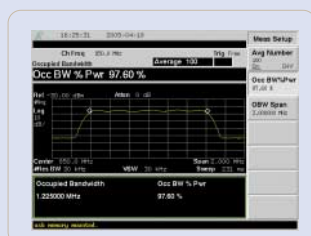
Keys are allocated for user's conveniences so that users can be easily familiar with them. And they provide various functions.

## 3 CDMA Measurement

### · Channel Power (CHP) Measurement :

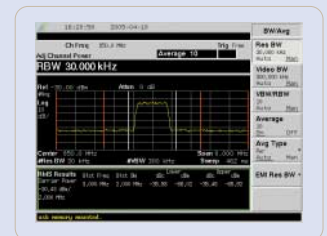
The PSA-6000 model provides power measurement functions for mobile communication and simple menus. Measured values are automatically displayed at the bottom of trace.

· **OBW Measurement** : Measures the Occupied Bandwidth(OBW) of modulation signal in the unit of %.



### ACP Measurement :

Measures the influence of transmitted power on the Adjacent Channel, or the ratio of power to the Adjacent Channel throughout the mobile communication system using multi-channel.



## 4 USB Interface

- Can store measured data into the USB Memory through its built-in USB Host that supports USB 1.1 and USB 2.0(GIF Format).
- Can convert measured data to MS Excel as it also supports the CSV file format.
- Supports nearly all types of printers such as Centronics printer and USB Interface printer.
- Firmware can be upgraded through USB by clicking on our website, <http://www.ed.co.kr>.

## 5 Large Internal Memory Space

- Waveform : stores maximum 900 waveforms
- State: stores maximum 3,000 states
- Easily stores/calls waveforms and states of the equipment based on various types of application and usage

## Specifications

Frequency	Range	9 kHz to 6.2 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 6.2GHz)		
	Frequency Selection	Start, Stop, Center Span Setup		
	Span Accuracy	±3% of the Indicated Span Width		
	Readout Accuracy	≤±(Indicated frequency × reference frequency accuracy + span × span accuracy + 50% of RBW)		
Amplitude	Phase Noise	≤ -90 dBc/Hz @10 kHz offset		
	Range	+ 20 dBm ~ -105 dBm, + 20 dBm ~ -130 dBm(Pre Amp ON)		
	Average Noise Level (1 kHz RBW, 10 Hz VBW)	≤ -105 dBm	150 kHz ~ 2.7 GHz	
		≤ -127 dBm(Pre Amp On)	20 MHz ~ 2.7 GHz	
		≤ -100 dBm, -123 dBm(Pre Amp On)	2.7 GHz ~ 6.2 GHz	
		≤ -130dBm(Pre Amp On) ; Typically		
	Amplitude Unit	dBm, dBmV, dBμV, V, mV, μV, W, mW, μW		
	Display Scale Linearity	≤ ±1.5 dB / 70 dB (10 dB / div), ≤ ±1.5 dB / 40 dB (5 dB / div), ≤ ±0.5 dB / 8 dB (1 dB / div), ≤ ±0.5 dB / 16 dB (2 dB / div)		
	Frequency Response (Based on 0dB atten)	-3.5 ~ 1.5 dB (100 kHz ~ 10 MHz) ±1.5 dB (10 MHz ~ 6.2 GHz)		
	Reference Level	Range : 20 dBm ~ -90 dBm, Resolution : 0.1 dB, Accuracy : ±1.5 dB		
	2nd Harmonic Distortion	≤ -60 dBc, -40 dBm input		
	Intermodulation Distortion	≤ -70 dBc, -40 dBm Input		
	Residual Spurious	≤ -85 dBm (Input terminated, 0 dB attenuation)		
	Other Input Spurious	≤ -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 dB (1 kHz Reference 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, Free run, Line		
	Trigger Modes	Continuous, Single		
	Trigger Level	TTL level		
Memory	Trace Storage	Maximum 900 waveforms		
	Setup Storage	Maximum 3000 states		
Screen Display	Type	6.4" Color TFT LCD		
	Display Resolution	640(H)×480(V) active display area		
	Marker Modes	Peak Search, Delta Marker, Marker to Center, 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 (with 0 dBm Ref Level)		
	Maximum Input Level	0 Vdc, +20 dBm		
Standard Frequency (10MHz, Ref.)	Temperature Stability	± 0.5 ppm		
	Aging	± 0.5 ppm / Year		
	Connector	BNC Female		
	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	
		USB Storage Device	Supports 1.1 and 2.0, image file for storage, GIF format	
	Ethernet(Optional)	10-Base-T Ethernet	Supports internet remote control	
GPIO Interface(Optional)	IEEE 488 Bus			
General Specifications	Dimensions	350(W)×195(H)×375(D)mm		
	Weight	10 kg		
	Warming up Time	20 minutes for the precision measurement		
	Power	Source Voltage and Frequency : 100-240 VAC at 50/60Hz, Power Consumption : 80 watts maximum without option		
	Operating Temperature	0 °C to 40 °C		
	Storage Temperature	-20 °C to 70 °C		
RF Emissions, RF Immunity	RF Emissions : EN 55011, FCC PART 15 Section 15.101, RF Immunity : EN 61326			

### Option

- GPIB INTERFACE (IEEE 488 Bus) · ETHERNET INTERFACE ; for Internet Remote Control · SOFT CARRYING CASE
- General KIT SET · CATV KIT SET · RETURN LOSS BRIDGE KIT SET

· Our product specifications may change in our efforts based on New Technology



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