

-130 dBm Average Noise Level • DTV Shoulder Mask measurement

Exceptional Price Full Digital Synthesizer Mode

3.0 GHz

Spectrum Analyzer

LPT-3000



- 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
- 1 Second Sweep Time
- 300 Hz RBW Filter for AM Digital
- 100 dBm Display Range
- Full Screen Display
- Save and Print Screen Shots
- Remote Operation from the Studio

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

The Model LPT-3000 Spectrum Analyzer is a fully synthesized RF Spectrum Analyzer featuring simple user controls which allow the novice or the seasoned expert to use the LPT-3000 right out of box. The LPT-3000 provides you with a powerful RF test and measurement tool for CDMA and WCDMA RF systems, broadcast RF systems, 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 LPT-3000 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.

Features

- High-performance digital synthesizer method
- Wide Frequency Coverage : 9 kHz ~ 3.0 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



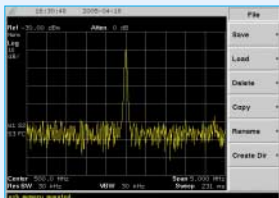
GPIB(Optional), LAN(Optional), RS-232C, Printer, EXT Trigger REF I/O (10 MHz)

■ Remote control function



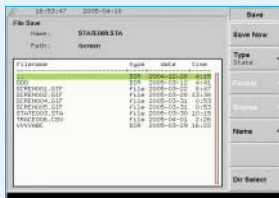
Remote controls the analyzer and manages data thru PC or Internet

■ Auto set function

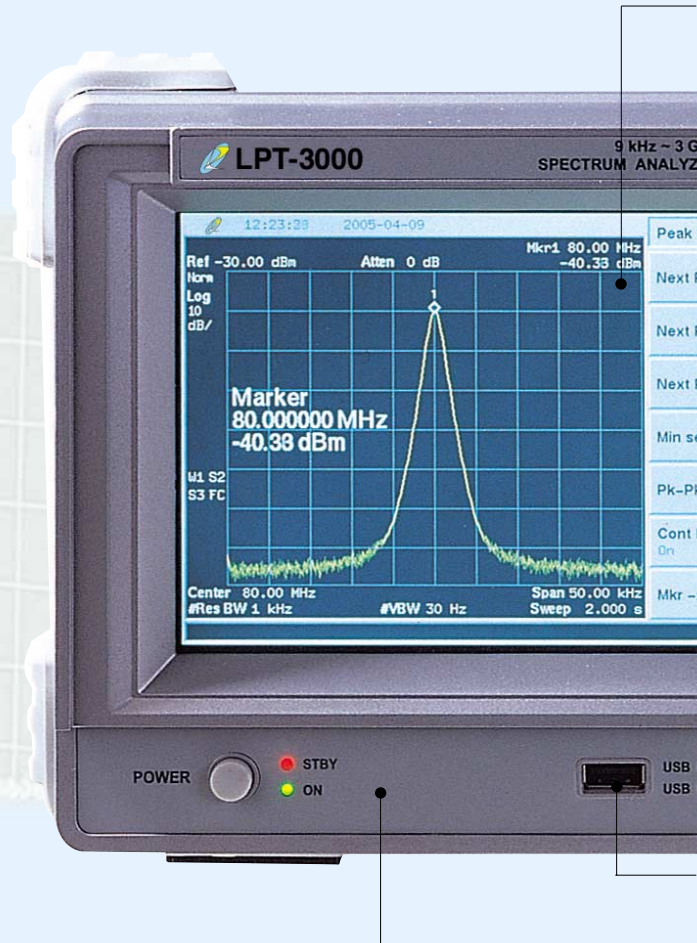


Automatically displays and sets maximum signal trace

■ Save / Recall function



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



① High definition 640 x 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 LPT-3000 model provides power measurement functions for mobile communication and simple menus. Measured values are automatically displayed at the bottom of trace.



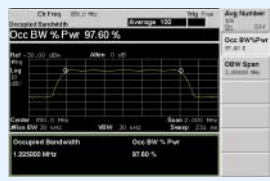
• OBW Measurement :

Measures the Occupied Bandwidth(OBW) of modulation signal in the unit of %.

frequency and dynamic range

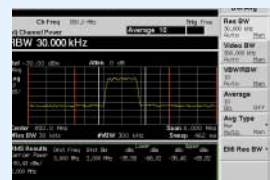


ACP Measurement : Measures the influence of transmitted power on the Adjacent Channel, or the ratio of power to the Adjacent Channel throughout the mobile communication system using multi-channel.



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



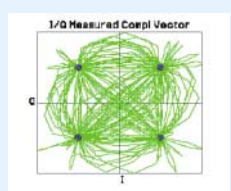
on our website, <http://www.lptech.com>.

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

6 CDMA Signal Generator (Option)

This optional CDMA Signal Generator(CDMA 2000 ; Pilot Channel, WCDMA ; CPICH) contains CW signal, digital internal modulation signal and IQ modulator within itself. It is the powerful signal source sought by the CDMA application-related fields such as training and education, inspection on modules, elements and amplifiers, and on-site repair and maintenance.



Specifications

Frequency	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 3GHz)		
	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 ~ 3 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 ~ 3 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, (New)300 Hz	
		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

- TRACKING GENERATOR · CDMA (CDMA2000, WCDMA) SIGNAL GENERATOR · GPIB Interface(IEEE488Bus)
- 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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