

AT6030DM / AT6060DM

SPECTRUM ANALYZER

3GHz / 6GHz



AT6030DM

9KHz-3GHz

AT6060DM

9KHz-6GHz

PRODUCT DESCRIPTION

The AT6000DM series is a digital Spectrum Analyzer having a wide bandwidth and dynamic range. It is perfectly suited to the mobile communication bands (CDMA2000, WCDMA) RF system broadcast EMI/EMC test etc.

The 6.4 inch color TFT-LCD display, centronics printer port, USB and internal data storage enhance the instrument. CDMA test functions include ACP, channel power, occupied bandwidth etc. You can enhance the instrument with options including, Tracking Generator, GPIB, LAN and more.

The AT6000DM series offers excellent value for money and you are assured of excellent support

CHARACTERISTIC:

- Measures wide frequency : 9 kHz ~ 3.0 GHz
- Superior Resolution : Minimum 1 Hz
- Compact and lightweight package
- Pre Amp as standard
- Wide Input Dynamic Range : -130 dBm ~ 20 dBm
- Easy and simple Key Buttons
- CDMA measurement functions : ACPR, ACLR, OBW, Channel Power
- Resolution Bandwidth (RBW) : 1 kHz ~ 3 MHz(1-3 Step), 9 kHz, 120 kHz
- Simple usage and convenience 8 Markers, Trace function, Trigger function
- Supports various types of convenient interface
- GPIB(option), RS-232C(option), Printer(supports nearly all types of Printer)
- REF in, REF out functions
- Large capacity internal memory for storing measured data
- Stores measured data up to 900 events
- Stores Setup data up to 3,000 events
- USB Host Port
- Supports USB Printer
- Stores data and applied Image file(GIF) into USB Flash memory
- Ethernet Port and Software(option) for Internet remote control

FREQUENCY

Range	AT6030DM: 9kHz to 3.0GHz / AT6060DM: 9kHz to 6.0GHz
Resolution	Minimum 1Hz
Span Range	100 Hz/div to 300 MHz/div Selection of 1, 2, 5 steps(automatic), ZERO Span, FULL Span (9KHz to 3.0GHz)
Frequency Selection	Start, Stop, Center, Span setup
Span Accuracy	$\pm 3\%$ of the Indicated Span Width
Readout Accuracy	$\leq \pm (\text{Indicated frequency} \times \text{Reference frequency accuracy} + \text{Span} \times \text{Span accuracy} + 50\% \text{ of RBW})$
Phase Noise	$\leq -100\text{dBc/Hz} (@ 10\text{kHz offset})$

AMPLITUDE

Range	+20 dBm ~ -105 dBm, +20 dBm ~ -130 dBm(Pre Amp ON)
Average Noise Level (1kHz RBW, 10Hz 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, uW
Display Scale linearity	≤ ±1.5 dB / 70 dB (10dB / div), ≤ ±1.5dB / 40dB (5dB / div) ≤ ±0.5 dB / 8 dB (1dB / div), ≤ ±0.5dB / 16dB (2dB / div)
Frequency Response (0 dB attenuation)	-3.5 ~ 1.5 dB (100kHz ~ 10MHz) ±1.5 dB (10MHz ~ 3GHz)

REFERENCE LEVEL

Range	-90 dBm to +20 dBm
Resolution	0.1 dB steps
Accuracy :	± 1.5 dB
Second Harmonic Distortion	≤-60 dBc, -40 dBm input
Inter-modulation 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 (1kHz Reference RBW)
Video Bandwidth	10 Hz to 3 MHz in 1-3-10 step

SWEEP

Rate	100 ms to 1000 sec, 40ms to 1000sec(zero span)
Accuracy	≤ ±20%
Trigger Source	External(rear), Video, Free Run, Line
Trigger Modes	continuous, single
Trigger Level	TTL level

STORAGE

Trace Storage	maximum 900 waveforms
Setup Storage	maximum 3,000 states

SCREEN DISPLAY

Type	6.4" color TFT LCD
Display Resolution	640(H) x 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 to 3.0 GHz, VSWR < 1.5 : 1(with 0 dBm Reference 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

Communication Port	RS-232C
Printer Driver	PCL Command, HP, EPSON,SAMSUNG,CANON Laser-Jet, Desk-Jet
Connector	for standard 25 pin female D-Sub parallel printer, supports USB
USB Host Printer Driver	PCL Command, HP, EPSON, SAMSUNG CANON Laser-Jet, Desk-Jet
USB Storage Device	Supports 1.1 and 2.0, for storing image file, supports GIF format
Ethernet(Optional)	10-Base-T Ethernet, Supports internet remote control
GPIO Interface(Optional)	IEEE488 bus

GENERAL SPECIFICATIONS

Storage Temperature: - 20°C To 70°C
 RF Emissions : EN 55011, FCC Part15 Section 15.101
 RF Immunity : EN 61326
 System Size : 350(W) X 195(H) X 370(D)Mm
 System Weight : 10kg
 Input Voltage : 100~240 VAC At 50/60Hz
 Operating Temperature : 0°C To 40°C

We pursue a policy of continuous development and product improvement. Thus the specifications and picture in this Spec sheet and control location on the front Panel may be changed.



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