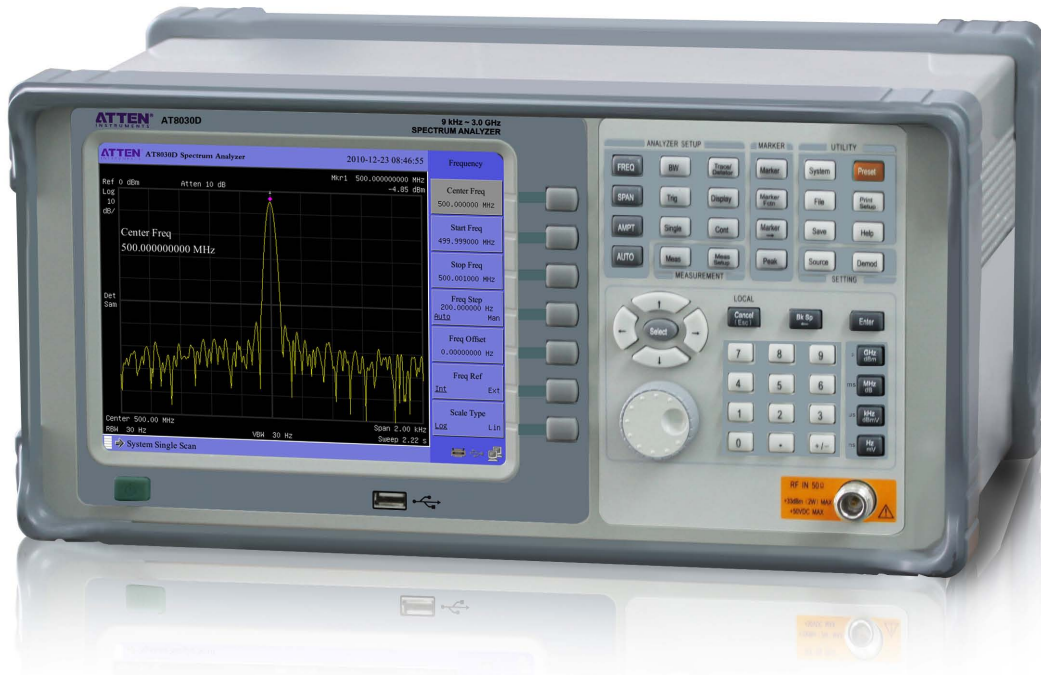


AT8030D

DIGITAL SPECTRUM ANALYZER

9kHz~3GHz



CHARACTERISTICS

- Frequency range: 9kHz~3GHz
- Resolution Bandwidth: 5Hz~3MHz in 1 to 10 steps
- Various measuring functions: frequency measurement, AM/FM demodulation, ACP measurement, chromatogram etc
- Multi-windows modes, Spectrum zooming function
- Display as many as of 5 track lines
- 8.4" LED back-lit display, English operation menu
- Interfaces: USB, LAN, VGA, GPIB, RS232
- Compact structure; metal enclosure

SPECIFICATIONS

Frequency

frequency range		9kHz~3GHz
resolution	1Hz	1Hz
reading accuracy		$\pm(\text{frequency reading} \times \text{reference frequency accuracy} + 1\% \times \text{scan width} + 10\% \times \text{RBW} + 0.5 \times [\text{scan width} / (\text{scan point}-1)] + 1\text{Hz})$
Internal base (10MHz)		
	Aging	<2ppm / year
	temperature drift	<2ppm (15°C - 38°C)

RBW	
Range (<1kHz optional)	5Hz~500kHz(in 1 to 10 steps),1MHz, 3MHz
Selectivity (60dB/3dB)	<5:1 rated value (digital implementation, near to Gaussian shape)
accuracy	<5%
Video bandwidth(VBW)	10Hz to 3MHz, in 1-3-10 steps

DANL(10Hz resolution bandwidth)	
100MHz	-124dBm
500MHz	-122dBm
900MHz	-120dBm
1.2GHz	-126dBm
1.8GHz	-123dBm
2.2GHz	-121dBm
2.6GHz	-120dBm
3GHz	-118dBm

Phase Noise	
	Deviation: (10kHz : -85dBc/Hz)
	Deviation (1MHz : -100dBc/Hz) <typical value>

※※Attention: typical f=5000MHz, RBW<1kHz, sampling detection, path line average number ≥10

Scanning Time	
Scan width range 100Hz≤SPAN≤3GHz	10ms-3000s
Scan Modes	Continuous, single

Frequency Counter	
Counter resolution	1HZ、10Hz、100Hz、1kHz
Counter Uncertainty	±(frequency reading×reference frequency accuracy + counter resolution)

Amplitude accuracy(20℃~30℃)		
Comprehensive Amplitude accuracy(90℃)	Input single range 0dB – 50dbM	±1.5dB

Amplitude		
Maximum input level	Average continuous power	+33dBm
Maximum dc input voltage	.....	50Vdc
Input attenuator range	.....	0–50dB
1dB compression point	.....	+13dBm

Spurious and Residual Response

TOI (third order inter-modulation distortion)	>30MHz	+10dBm
Second Harmonic Distortion	.....	+40dBm
Input relative spurious signal	.....	<-60dBc
Residual Response	.....	<-85dBm

Input and output

RF input		N-type negative (50Ω)
USB		USB2.0 (host); USB2.0 (device)
LAN		10/100 Base-T, connector RJ-45
RS232		9 pins D-SUB (positive)
Reference input or output	10MHz, BNC (negative)	Input power 0dBm to +11dBm Output power 0dBm±2dB
VGA (optional)	800×600, 60Hz	15 pins D-SUB (negative)
GPIB (optional)		IEEE-488 bus connector

Common Specifications

Internal data storage	.....	256MB to user mode and path
display	LED backlight brightness adjustable	8.4 inch TFT-LCD
maximum weight	.....	7.6kg
size		390(W)×182(H)×230(D)mm
	Not including protecting feet.	
Operating temperature	.....	0°C to 45°C
storage temperature	.....	-25°C to +70°C
power supply	Input voltage range	220VAC±15%
	AC frequency range	40Hz to 60Hz
	power consumption	maximum 60W