DEVISER Wireless

E8000 Series
Spectrum Analyzers

Key Benefits

- Handheld, lightweight, rugged design that withstands harsh environments and lighting conditions
- Intuitive menu structure enables ease of use and quick measurements
- Quickly identifies, locates and maps signal interference
- Performs comprehensive signal analysis for complete site profile and monitoring of signal environment
- Occupied Bandwidth, Channel Power and ACPR
- Dual spectrum and spectrogram measurements
- Verify RF transmission

Verify RF Transmission. Identify and locate signal interference. Confirm coverage.

Today's wireless spectrum is shared among different communications systems and services including mobile communications, mobile radios, paging, wireless local-area networks and digital video broadcasting. In additional to licensed systems, the spectrum is also shared with unlicensed transmitters and signal impairments such as reflections and fading. The combination of all these signals creates a very complex environment which must be first cleared and routinely monitored in order to maximize service performance.

Designed specifically for wireless communications field engineers and technicians, the E8000 Series of Spectrum Analyzers provide all necessary measurement functions and performance to accurately characterize the signal environment in addition to clearing, detecting, identifying and locating signal interference in a lightweight, handheld instrument.

Measurements

- Spectrum Analysis
- Channel Power
- Occupied Bandwidth (OBW)
- Adjacent Channel Leakage Ratio (ACLR)
- Field Strength
- FM/AM

Optional Measurements Modes

- Interference Analyzer (DML-110)
- Coverage Mapping (DML-120)
- High Precision Power Meter (DML-015)
- Tracking Generator (DML-035)
- GPS (DML-999)

Specifications

Frequency	
Frequency Range	9 kHz – 3.0 GHz
Tuning Resolution	1 Hz
Aging	<± 1.0ppm/yr
Frequency Span	1 kHz to 3GHz in 1-2-5 sequence (automode), and 0 Hz (zero span)
Bandwidth	
Resolution Bandwidth (RBW)	10Hz to 3MHz in 1-3 sequence (auto or manually selectable)
Video Bandwidth (VBW)	10Hz to 1MHz in 1-3 sequence (auto or manually selectable)
Spectral Purity (Phase Noise)	
@ 1 kHz Offset from carrier	-85 dBc/Hz
@ 10 kHz Offset from carrier	-95 dBc/Hz
@ 100 kHz Offset from carrier	-100 dBc/Hz
Amplitude	
Dynamic Range	> 85 dB
Measurement Range	DANL to maximum safe input level
Maximum Safe Input	+30dBm (peak power, input attenuation > 15dB), 50VDC
Amplitude Accuracy	≤ ± 1.0 dB
Attenuator Range	0 dB to 55 dB in 5 dB steps
Displayed Average Noise Level (DANL)	
(Input terminated, RBW = 10 kHz, Attn = 0 dBm, Sample Detector)	
Preamp Off	≤ -142 dBm, typical (1MHz – 1GHz) ≤ -138 dBm, typical (1GHz – 3GHz)
Preamp On	≤ -155 dBm, typical (1MHz – 1GHz) ≤ -151 dBm, typical (1GHz – 3GHz)
Connectors	
RF In	Type N, female, 50Ω
Connectivity	
USB host	Type A, 1-Port (connect flash drive for data transfer)
USB client	5-pin mini-B (connect to PC for data transfer)
LAN	10M/100M LAN Port
Display	
Type / Size	TFT LCD / 6.5" (640 x 480)
Data Storage	
Internal	1 GB, > 2000 saved measurement files
External	Limited by size of USB flash drive
Battery	
Type	Li-Ion, 11.1V, 5.2AH
Operation	> 4.5 hours, continuous; 8.0 hrs, idle
Environmental	
Operating Temperature	-10°C to + 55 °C
Storage Temperature	-20 °C to + 75 °C
Shock	Mil-PRF-28800F Class 2
EMC	
European EMC	IEC/EN 61326-1:2006
AC Power	
AC Adapter Output	15-19 VDC
AC Adapter Input	100 – 240 VAC, 50-60 Hz
Size & Weight	
Size	258 mm x 173 mm x 74 mm (10.2 in x 6.8 in x 2.9 in)
Weight	2.2 kg (4.85 lbs)

Standard Accessories

Rechargeable Li-Ion battery	E8000-0300
AC-DC adapter	FSP065-RAB
Vehicle Plug-in lighter adapter	E7000-0400
1.5m RF Test Port Cable, N(m), 6GHz	E7000-0702
Soft carry case	E7000-0600
Measurement Center Software CD-ROM with Users-Manual	E7000-0200

Optional Accessories

RF Test Port Cable, Armored, 1.5m, N(m) to N(f), 18GHz, 50Ω	DTC-18NMNF-1.5
RF Test Port Cable, Armored, 1.5m, N(m) to 7/16 DIN(f), 18GHz, 50Ω	DTC-18NMDF-1.5
RF Test Port Cable, Armored, 1.5m, N(m) to 7/16 DIN(m), 18GHz, 50Ω	DTC-18NMDM-1.5
RF Test Port Cable, Armored, 3.0m, N(m) to 7/16 DIN(f), 18GHz, 50Ω	DTC-18NMDF-3.0
RF Test Port Cable, Armored, 3.0m, N(m) to 7/16 DIN(m), 18GHz, 50Ω	DTC-NMDM-3.0
Precision Adapters	
Precision Adapter Kit, 50Ω (PNMDM, PNFDM, PNMDF, PNFDF, PDFDF, PDFDM 90°)	DPAK-6G100
Precision Adapter, N(m) to N(m), DC to 18GHz, 50Ω	DPA-18NMNM
Precision Adapter, N(f) to N(f), DC to 18GHz, 50Ω	DPA-18NFNF
Precision Adapter, N(f) to 7/16 DIN(m), DC to 18GHz, 50Ω	DPA-18NFDM
Precision Adapter, N(f) to 7/16 DIN(f), DC to 18GHz, 50Ω	DPA-18NFDF
Precision Adapter, N(f) to SMA(f), DC to 18GHz, 50Ω	DPA-18NFSF
Attenuators	
10W, 6dB, DC-6GHz, N(f) to N(m)	DATT-6NFNM-10-6
50W, 30dB, DC-6GHz, N(f) to N(m)	DATT-6NFNM-50-30
100W, 40dB, Bi-Directional, DC-18GHz, N(f) to N(m)	DATT-6NFNM-100-40
Directional Antennas	
806-960 MHz, N(f), 10 dBi, Yagi	ET0806D
822-900 MHz, N(f), 10 dBi, Yagi	ET0850D
824-960 MHz, N(f), 10 dBi, Yagi	ET0824D
885-970 MHz, N(f), 10 dBi, Yagi	ET0900D
1710-1880 MHz, N(f), 10 dBi. Yagi	ET1800D
1850-1990 MHz, N(f), 10 dBi, Yagi	ET1900D
1920-2170 MHz, N(f), 10 dB, Yagi	ET2100D
2400-2500 MHz, N(f), 10 dBi, Yagi	ET2400D
9 kHz to 20 MHz, log periodic	ET0020L
20 MHz to 200 MHz, log periodic	ET0200L
200 MHz to 500 MHz, log periodic	ET0500L
500 MHz to 3 GHz, log periodic	ET3000L
Portable Antennas	
470-860 MHz, SMA(m), 50 Ω	ET0470P
806-866 MHz, SMA(m), 50 Ω	ET0850P
870-960 MHz, SMA(m), 50 Ω	ET0900P
1710 to 1880 MHz, SMA(m), 50 Ω	ET1800P
1850 to 1990 MHz, SMA(m), 50 Ω	ET1900P
1920 to 2170 MHz, SMA(m), 50 Ω	ET2100P
2400 to 2500 MHz, SMA(m) , 50 Ω	ET2400
5725 to 5875 MHz, SMA(m), 50 Ω	ET5800
Power Sensors	
In-line Bi-Directional High Power Sensor, 300 MHz to 4GHz, 2mW to 150W, N(f) 50Ω	E7000A-050
Terminal Power Sensor	E7000A-040