

E7000L SitePROFILER™ Cable & Antenna Analyzer

Key Features

- Handheld, lightweight, field-proven design withstands harsh environments and lighting conditions
- Easily set up measurements with over 100 preset wireless frequency bands and cable types
- Reduce test time with dual measurement display to make two measurements simultaneously
- Detect signal degradation and system performance over time with trace overlay
- Instant Pass/Fail status
- Manage your measurement data and test setups with Measurement Center Software
- Intuitive touchscreen user interface for easier, faster measurements



Verify cell site RF transmission settings, cable feedline and antenna systems.

The proliferation of wireless networks has placed increased demands on wireless professionals and contractors, who install, maintain and troubleshoot wireless communication networks. The majority of problems in wireless network installation and performance often occur within the base station infrastructure consisting of the cable and antenna system and associated RF connectors. Compounding the problem, often times cell sites are located in rural or difficult to access locations.

Designed specifically for carriers, wireless professionals and contractors who install, maintain and troubleshoot wireless communications networks, the E7000 Series of Cable & Antenna Analyzers provide all necessary measurement functions and performance to accurately diagnose and verify the site's cable and antenna system and RF connectors, as well as basic fiber-feedline testing.

Measurements

- Reflection - Return Loss or VSWR
- Fault Location – DTF/RL or DTF/VSWR
- Cable-loss
- 1-Port Phase
- Smith Chart

Optional Measurements Modes

- RF Power Meter (DML-015)
- Optical Power Meter (DML-016)
- Visual Fault Locator (DML-017)

Specifications

| Frequency | |
|--------------------------------|--|
| Frequency Range (E7000L) | 2 MHz – 4.4 GHz |
| Resolution | 0.5 kHz |
| Measurement Speed | |
| Reflection | < 1.0 mS/point |
| DTF | < 1.25 mS/point |
| Data Points | 130, 259, 517, 1033, 2065 |
| Measurement Accuracy | |
| Corrected Directivity | 42 dB (typical, after standard OSL calibration) 38 dB (typical, after eCAL calibration) |
| Output Power | |
| 0 dBm (Nominal) | |
| Interference Immunity | |
| On-channel | +25dBm @ >1MHz of carrier frequency |
| Off-channel | +10dBm within ± 10 kHz of carrier frequency |
| Measurements | |
| Return Loss | 0 to 60dB (Resolution 0.01 dB) |
| VSWR | 1:1 to 65:1 |
| Cable Loss | 0 to 30 dB (Resolution 0.01 dB) |
| DTF Range (Distance) | 1500 meters (4921 feet) |
| Connectors (Reflection/RF Out) | |
| RF Out | Type N, female, 50Ω |
| RF Out Damage Level | 25 dBm, ± 50 VDC |
| Connectivity | |
| USB host | USB 2.0 Type A |
| USB client | 5-pin mini-B (connect to PC for data transfer) |
| LAN | RJ45 10M/100M LAN Ethernet Port |
| Display | |
| Type / Size | TFT LCD / 7.0" (800 x 480) |
| Data Storage | |
| Internal | 1 GB, > 2000 saved measurement files |
| External | Limited by size of USB flash drive |
| Battery | |
| Type | Li-Ion, 7.4V, 7.5AH |
| Operation | TYP.> 8.0 hours, continuous |
| Environmental | |
| Operating Temperature | -10°C to + 55 °C |
| Storage Temperature | -40 °C to + 80°C |
| Maximum Humidity | 95% RH (non-condensing) @ 40 °C |
| Shock | Mil-PRF-28800F Class |
| Altitude | 4600 meters, operating and non-operating |
| EMC | |
| European EMC | IEC/EN 61326-1:2006 |
| AC Power | |
| AC Adapter Output | 11-14 VDC |
| AC Adapter Input | 100 – 240 VAC, 50-60 Hz |
| Size & Weight | |
| Size | 245 mm x 190 mm x 75 mm (9.64 in x 7.48 in x 2.95 in) |
| Weight | 2 kg (4.4 lbs) |

| Standard Accessories | |
|---|----------------|
| Rechargeable Li-Ion battery: 7.4V, 8.7Ah | 6130.0100.01 |
| AC-DC adapter: 11-14VDC | FSP065-RAB |
| Vehicle Plug-in lighter adapter | E8000-040 |
| 1.5m RF Test Port Cable, N(m), 6GHz | E7000-0702 |
| Calibration Combo Open/Short/Load, N(m), 6GHz | E7000-0700 |
| Soft carry case | DS2800-008 |
| Measurement Center Software CD-ROM with Users-Manual | E7000-0200 |
| Optional Accessories | |
| RF Test Port Cable, Armored, phase stable, 1.5m, N(m) to N(f), 6GHz, 50Ω | DTC-6SNMNF-1.5 |
| RF Test Port Cable, Armored, phase stable, 1.5m, N(m) to 7/16 DIN(f), 6GHz, 50Ω | DTC-6SNMDF-1.5 |
| RF Test Port Cable, Armored, phase stable, 1.5m, N(m) to 7/16 DIN(m), 6GHz, 50Ω | DTC-6SNMDM-1.5 |
| RF Test Port Cable, Armored, phase stable, 3.0m, N(m) to N(f), 6GHz, 50Ω | DTC-6SNMNF-3.0 |
| RF Test Port Cable, Armored, phase stable, 3.0m, N(m) to 7/16 DIN(f), 6GHz, 50Ω | DTC-6SNMDF-3.0 |
| RF Test Port Cable, Armored, phase stable, 3.0m, N(m) to 7/16 DIN(m), 6GHz, 50Ω | DTC-6SNMDM-3.0 |
| RF Test Port Extension Cable, phase stable, 1.5m, N(f) to N(f), 6GHz, 50Ω | DTC-6SNFNF-1.5 |
| Precision Adapter Kit, 50Ω (NMDM, NFD, NMF, NDF, DFD, DFM90°) | DPAK-6G100 |
| Precision Adapter, N(m) to N(m), DC to 18GHz, 50Ω | DPA-NMNM |
| Precision Adapter, N(f) to N(m), DC to 18GHz, 50Ω | DPA-NFNM |
| Precision Adapter, N(f) to N(f), DC to 18GHz, 50Ω | DPA-NFNF |
| Precision Adapter, N(f) to 7/16 DIN N(m), DC to 6GHz, 50Ω | DPA-NFDM |
| Precision Adapter, N(f) to 7/16 DIN N(f), DC to 6GHz, 50Ω | DPA-NFDF |
| Precision Adapter, N(f) to SMA(f), DC to 6GHz, 50Ω | DPA-NFSF |