

## Model 6000DSL General Specifications

### MODEL 6000DSL

#### Physical

##### Without carrying case & accessories:

Height: 6.30 inches (160 mm)  
Width: 9.45 inches (240 mm)  
Depth: 2.36 inches (60 mm)  
Weight: 3 pounds (1.3 kg)

##### With carrying case and accessories:

Height: 7.80 inches (198 mm)  
Width: 11.0 inches (279 mm)  
Depth: 6.50 inches (165 mm)  
Weight: 6 pounds (2.6 kg)

#### Remote Device

Height: 8.50 inches (216 mm)  
Width: 3.94 inches (100 mm)  
Depth: 1.58 inches (40 mm)  
Weight: 1 pound (0.4 kg)

#### Oscillator/Far End Unit

Height: 9.06 inches (230 mm)  
Width: 1.38 inches (35 mm)  
Depth: 0.98 inches (25 mm)  
Weight: 7.41 ounces (210 g)

#### Environmental

Operating Temperature: 0°C to 50°C (32°F to 122°F)  
Storage Temperature: -20°C to 60°C (-4°F to 140°F)  
Humidity: 95% maximum relative,  
non-condensing IEC 68-2-3  
Vibration: IEC 68-2-6  
Shock (Bump): IEC 68-2-29, 40g, 6ms,  
1000 shocks in each axis  
Drop: IEC 68-2-27, 1m free fall,  
Packaged in carry case  
Moisture rating: IP 54

#### Power

Internal: Rechargeable, 7.2V nickel metal  
hydride battery pack  
External: 12VAC or VDC, 1250mA power  
supply  
Operating Time: Greater than 5 hours  
without backlight

#### Display

320 X 240 dot-matrix liquid crystal display (LCD)  
with CCFL backlighting.

#### Multi-Meter

DC Voltage: 0 to 400V  
Resolution: 0.1V  
Accuracy: 1%±0.1V

AC Voltage: 0 to 400V  
Resolution: 0.1V  
Accuracy: 2%±0.1V

Foreign Battery: 2 to 400V  
Resolution: 0.1V  
Accuracy: 1%±0.1V

Resistance: 0 to 2k  
Resolution: 0.1Ω  
Accuracy: 0.2%±0.2Ω

Resistance: 2kΩ to 10kΩ  
Resolution: 1Ω  
Accuracy: 0.2%±1Ω

#### Insulation Resistance

Voltages: 50V/100V/250V/500V  
0.00MΩ to 10MΩ  
Resolution: 0.01MΩ  
Accuracy: 2%±0.01MΩ

10MΩ to 100MΩ  
Resolution: 0.1MΩ  
Accuracy: 4%

100MΩ to 1GΩ  
Resolution: 1MΩ  
Accuracy: 10%

#### Open/Capacitance Meter

0 to 1000 ft (0 to 100 m)  
Resolution: 1 ft (0.1 m)  
Accuracy: 2% ±3 ft (1 m)

1000 ft to 10,000 ft (100 m to 1,000 m)  
Resolution: 10 ft (1 m)  
Accuracy: ±3%

10,000 ft to 100,000 ft (1000 m to 10,000 m)  
Resolution: 100 ft (10 m)  
Accuracy: ±5%

100,000 ft to 150,000 ft (10,000 m to 50,000 m)  
Resolution: 1000 ft (100 m)  
Accuracy: ±8%

#### Pair Quality

Loop Current: 0 to 120mA  
Resolution: 0.1mA  
Accuracy: 5% ±0.2mA

Noise Metallic (POTS): 0 to 50 dBmC  
Resolution: 1 dB  
Accuracy: ±2 dB

Power Influence (POTS): 40 to 100dBmC  
Resolution: 1 dB  
Accuracy: ±2 dB

Longitudinal Balance (POTS): 40 to 62dB  
Resolution: 1 dB  
Accuracy: ±2 dB

Insertion Loss: 0 to 60 dB  
Frequency Range: 30 Hz to 2.2 MHz  
Resolution: 1 dB  
Output Level: 0 and -10 dBm

Crosstalk (NEXT and FEXT): -20 dB to -70 dB  
Frequency Range: 30 Hz to 2.2 MHz  
Resolution: 1 dB  
Output Level: 0 and -10 dBm  
Impedance: 100, 120, 135, 600, 900 ohm  
and TN12

#### Power Spectral Density

Wideband Dynamic range -20 to  
-140 dBm/Hz  
Frequency Range: 10 kHz to 2.2 MHz  
Resolution BW: 10 kHz  
Impedance: 100Ω, 120Ω and 135Ω

#### Time Domain Reflectometer loaded and non-loaded cable

Horizontal Resolution:  
*For distances less than 2,000 ft:*  
<0.25 ft at any VOP  
<0.07m at any VOP

*For distances over 2,000 ft:*  
1 foot at any VOP  
0.1 meter at any VOP

Vertical Sensitivity: >65dB

Output signal: Pulse widths of 2ns, 25ns,  
100ns, 500ns, 1.5μ, 4.4μ and 330μ.

Distance Accuracy:  
±0.5 ft plus ±0.01% of reading  
±0.15 m plus ±0.01% of reading

#### Maximum Range

Live waveform:  
63,700 ft (19,400 m) at 99.0% VOP  
38,600 ft (11,700 m) at 60.0% VOP

*Range varies with VOP. Maximum testable  
cable length varies with pulse width and  
cable type.*

Stored waveform:  
11,900 ft (3,600.0 m) at 99.0% VOP  
7,200 ft (2,200.0 m) at 60.0% VOP

*Range varies with VOP*

#### Input Protection

400VAC or VDC up to 60 Hz

#### Velocity of Propagation

*Two user-selectable display formats:*  
VOP and V/2

#### Waveform Storage

8 SUPER-STORE waveforms at  
6144 samples each (Standard)  
32 SUPER-STORE waveforms at  
6144 samples each (Optional)

#### Software Noise Filters

8x, 50/60 Hz (Standard)  
4x, 8x, 16x, 32x, 64x, 128x, 50/60 Hz  
(Optional)

#### Resistance Fault Locator (RFL)

Location Range: 0 to 150 kft  
(0 to 45 km)

Resistance fault range: 0 to 50MΩ

Accuracy:

- 3-Wire Test: ±0.25% of DTS  
plus ±0.4 ohms
- 4-Wire Test: ±0.25% of DTS  
plus ±0.25 ohms
- Kupfmuller Test: ±1.0% of DTS  
plus ±1 ohm

#### Riser Bond Remote and Optional

##### Oscillator

##### Remote Device

Communications for:  
Short pair  
Open pair  
Exchange connect, disconnect  
Send Loss/Crosstalk signals  
Set Terminations  
Pair identification tone

#### Oscillator/Far End Unit

Communications for:  
Short pair  
Open pair  
Exchange connect, disconnect  
Pair identification tone

#### Standard Accessories

Operator's Manual, 12VDC charger, nylon  
carry/accessory bag, 2 shoulder straps, 2  
sets telco connection leads plus ground lead,  
pair shorting strap, VOP card, "hands-free"  
telephone ear piece/microphone.

#### Optional Accessories

Extended waveform storage, 32 waveforms  
Extended TDR noise filters, Extended  
Warranty