# Spirent E-Series E2550 HANDHELD TDR TESTER

Tester is a long-range, battery- powered time domain reflectometer that accurately locates faults on twisted pairs, coaxial, and power cables. Common network faults such as shorts, opens, and water ingress faults are all easy to find with this accurate, reliable, and simple unit.

## LONG-RANGE CAPABILITY WITH HIGH RESOLUTION FOR SHORT-RANGE MEASUREMENT

The E2550 can locate faults up to 9800 feet away with an accuracy of 3.9 inches at a range of 30 feet.

#### **VARIABLE VELOCITY FACTOR**

Variable VF from 0.30 to 0.99 in steps of 0.01 ensures that accurate results can be obtained on a variety of cables.

### NO DEAD ZONE WITH INTERNAL BALANCE CONTROL

A balance control is provided to cancel the mismatch between the unit and the line under test, making it easier to locate faults close to the unit.

### **USER VARIABLE GAIN**

The E2550 provides a variable gain feature to improve fault location across the entire range. This capability enables you to analyze faults at longer distances with higher gain while analyzing closer faults with lower gain.

#### **SWITCHABLE OUTPUT IMPEDANCE**

Four output impedance settings are available to deal with commonly used cables.

- 100-ohm—Twisted pair
- 75-ohm—75-ohm Coax
- 50-ohm—50-ohm Coax
- 25-ohm—Power distribution cables

The standard test leads provided can be used on 100-, 75-, and 50-ohm settings. In addition, the E2501 mains filter can be used on a 25-ohm setting to test cables carrying mains voltages without first isolating them.

#### **HIGH-RESOLUTION DISPLAY**

The E2550's clear LCD with backlight facility ensures easy reading of results regardless of the working environment.

### **USER-FRIENDLY, INTUITIVE INTERFACE**

The E2550's simple, easy-to-use interface automatically begins testing when the unit is turned on.

#### LIGHTWEIGHT—IDEAL FOR FIELD USE

Weighing in at only 1.32 lb. with batteries, the lightweight E2550 is ideal for use in the field.

#### **AUTOMATIC POWER-DOWN FEATURE**

After five minutes with no user action, the unit automatically switches off to conserve battery power.

#### **SPIRENT GLOBAL SERVICES**

Spirent Global Services provides a variety of professional services, support services and

education services - all focused on helping customers meet their complex testing and service assurance requirements. For more information, visit the Global Services website at www.spirentcom.com/gs or contact your Spirent sales representative.



### **E2550 HANDHELD TDR TESTER**

General Specifications		
Physical Characteristics		
Case dimensions (L x W x H)	7.48 x 3.54 x 2.12 in.	
Display dimensions	1.73 x 2.28 in.	
LCD	128 x 64 graphic with backlight	
Case material	ABS & Polycarbonate	
Weight	1.32 lb. (with batteries)	
Connectors	6 feet	
Power		
Batteries	6 AA size manganese alkali or nickel-cadmium replaceable cells	
Battery life	Approximately 30 hours	
Auto switch off	After 5 minutes with no key press	
Environmental Requirements		
Bump	To IEC 68-2-29	
Drop	To IEC 1010, Clause 8.4	
Vibration	To IEC 1010, Clause 8.3	
Impact	To IEC 1010, Clause 8.2	
Humidity	0 – 93% RH @ +104°F	
Operational temperature	5° to 122°F	
Storage temperature	-4° to 158°F	
Cold temperature	To IEC 68-2-1	
Dry heat	To IEC 68-2-2	
Damp heat	To IEC 68-2-3	
Water/dust ingress	IP54	
Protection, Safety, and EMC		
Protection	■Withstands ringing tone. ■Withstands 300 V DC or 250 V AC	
Safety	Complies in general with IEC 1010 Withstands 250 V AC/DC and ringing tone	
EMC	Complies with BS EN 50081.1 and BS EN 50082.1	

Technical Specifications		
Range	30 ft. 90 ft. 300 ft. 900 ft. 3000 ft. 9000 ft. Auto range	
Accuracy	■±1% of range ±1 pixel on 30 and 90 ft range ■±1% of range on other ranges at VF 0.66	
Resolution	1% of range	
Gain	Automatically adjusted to suit range and cable type, with 4 user-selectable steps	
Velocity factor	Variable from 0.30 to 0.99 in steps of 0.01	
Output pulse amplitude	5 V peak to peak in open circuit	
Output impedance	25 Ω 50 Ω 75 Ω 100 Ω	
Pulse width	Automatically varied by software for range and output impedance selected	
Update rate	Once per second for 5 minutes with no key depression	
Ordering Information		
Model		
E2550 Handheld TDR Tester (North America)	E2550-NA	
Options		
Mains Filter (for usewith power lines)	E2501	
Spares		
Battery 1.5 V IEC LR6	CEJ0006	
Carry Case	DDP0035	
Test Lead	DFK0136	
Instruction Manual	CMR0070	
All units are shipped star	ndard with carrying case, leads,	



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#### **SALES AND INFORMATION**

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batteries, and instruction manual.