

Cable Explorer - TDR (Time Domain Reflectometer) Module

Data Sheet



CE4000 TDR Module in place with the CM1000

Quickly locate cable faults, loose connectors, bad crimps, damaged cable, water ingress, corrosion, illegal hookups, bad in-home wiring and damaged drop or distribution cable. The CE4000 module measures cable loss and Total Return Loss. It then compensates the RTL measurements for cable loss. Because the cable loss is taken out of the measurement, you can tell the true quality of the connections in the system and the connected components..

When installed in the mainframe of the CM1000, the CE4000 module goes through the self-mode and provides the user with a menu of TDR tests. The user may select an Auto Test mode, Manual Test mode, recall stored data or set up the configuration of the TDR. Once a cable is selected or the VOP is set, the Auto Test mode will automatically identify any impairment on the cable under test that simplifies the operation..

KEY FEATURES

- Plugs into the CM1000 base
- Quickly locates cable faults that cause ingress, leakage and level problems
- Measures Distance, Cable Loss, Return Loss and Total Loss
- Stores and recalls screens for downloading to a PC
- Built-in cable VOP and Loss files for common TV coax cables
- Zero Dead Zone

BENEFITS

- Tests the cable inside the home, without actually entering the home
- The VOP and cable loss may be automatically determined from a known length of test cable and stored in the CE4000 for future use
- Automatic one-button approach permits testing as expertly as someone with years of experience

APPLICATIONS

- Identify and locate cable and component failures and faults that contribute to ingress, leakage and level problems in the distribution plant and drop
- Identify possible sources of micro-reflections that can cause data throughput issues as well as VoIP service degradations.



SPECIFICATIONS

Horizontal Resolution

<2000 ft: at .99 VOP: 0.25 ft
>2000 ft: at any VOP: 1.00 ft

Range

Maximum All VOPs 4000 ft
Dead Zone: 0 ft
Distance Accuracy: $\pm .1\text{ft} \pm .01\%$

Input Protection

DC to 400 Hz 400 V
>1 MHz 10 V

Measurements

Loss Measurement accuracy: ± 2 dB
VOP: 0.01
Velocity of Propagation: 0.300 to 0.990 or 30.0% to 99.0%
Pulse Widths: 10, 20, 50, 100, 200, 350

Waveform Storage

Standard: 25

Cable VOP Database

Pre-Programmed Database: ~50 Common Cables
Cable Loss Compensation

Environment

Min. Operating temperature: 0°C
Max. Operating temperature: 50°C
Humidity: (non-condensing) 95%

Interfaces

RF Input

75-ohm F81 (Do not exceed 90V AC/DC or 10V > 1 MHz)

PRODUCT DESCRIPTION

Power

Internal: NiMH battery pack, part number: ASY-12183-010
Operating time: 3 hours continuous (typical)
Automatic low battery shutdown
Charger Input: Min. 15.5VDC 2.5A— Max 18VDC 2.8A

Display

Color Active Matrix LCD 320 x 240
Backlight: Programmable Auto Off

Physical

Size: 11" high x 5" wide x 2-3/4" deep
Weight: 0.3 lbs
Operating Temperature Range: 0°C to 50°C (32°F to 122°F)

ORDERING INFORMATION

CE4000 Cable Explorer – TDR (Time Domain Reflectometer)
Module

For more information or a directory of sales offices: info@sunrisetelecom.com | www.sunrisetelecom.com
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