



**FEATURES**

- TDR for coaxial cables
- Easy to operate
- Automatic detection of the fault
- Small size, suitable for using in the field at different weather conditions
- Widest range in a hand-held cable fault locator up to 16 km
- Language selectable: English, Italian
- ETDR 10A-C provides:
  - Examination of live lines
  - Location of intermittent faults
  - Comparison of live line to memory
- 100 memories for waveform and setting storage
- Clear waveform display of full trace for accurate diagnosis, 320 x 240 LCD color display with backlight
- Zoom for detailed examination
- Cable library for standard and user defined cable types
- Results can be transferred to PC via USB cable, via WLAN or can be stored on memory stick.
- Internal rechargeable lithium-ion battery pack
- Unit adjustment between V/2 and VOP

**SPECIFICATIONS**

**Ranges (V/2=100)**

1. ....	16 m
2. ....	32 m
3. ....	64 m
4. ....	160 m
5. ....	320 m
6. ....	640 m
7. ....	1600 m
8. ....	3200 m
9. ....	6400 m
10. ....	16000 m

(Maximum range depends on cable features)

**Evaluation of results**

with cursor and marker in meters

**Zoom**

Selectable ..... OFF, 2.5, 5

**Resolution**

with zoom ..... 0.06% of range  
 without zoom ..... 0.3% of range

**Accuracy**

Sampling ..... 0.01 m  
 Fault location ..... 0.2% of range

**Propagation velocity**

V/2 range ..... 45 to 150 m/us  
 VoP range ..... 0.3 to 0.999 (30 to 99.9%)  
 Resolution ..... 0.001 (0.1%)

**APPLICATIONS**

The ETDR 10A-C has been designed for quick and accurate fault location and qualification of coaxial telecommunication cables using impulse reflection technique.

The various measuring modes provide accurate location of discontinuities and errors like open circuit, wet section, loose contact etc.

ETDR 10A-C employs optimized pulsing and sampling methods, supported with advanced filtering and signal processing techniques, to reach the maximum measurement range and clean waveform for easier fault interpretation.

ETDR 10A-C is designed for ease-of-use. If you select the cable type from the on board cable library and set the measurement range covering the length of the cable to be tested, V/2, gain, pulse width, and the distance dependent compensation of cable attenuation are automatically set as default.

3 to 10 ns pulse widths for close-in resolution. Faults as near as 0.5 m from the pedestal can be easily located. 30 ns to 6 μs pulse widths for the test of long cables. Help facility with sample traces and useful topic related information.

PC program is provided for post processing and transfer of test results via USB port.

**Measuring modes**

CONTINUOUS	Repeated measurements
AUTO	Automatic configuration
LONG TIME	Location of intermittent faults
SINGLE	Only one measurement
CABLE & Memory CABLE – Memory	Comparison to memory

**Pulse characteristics**

Amplitude: ..... max 10V peak to peak to open circuit

Widths :

3, 6, 10, 30, 60, 100, 300, 600 ns 1, 3, 6  $\mu$ s

The provided pulse width changed with range.

The pulse amplitude changed with gain and width.

**Gain control**

Range.....0 to 90 dB

Steps.....6 dB/step

**Line connection**

Impedances:

50, 75, 93 Ohm coaxial

Balance control ..... up to 250 Ohm

**Memory locations**

For waveforms ..... 50

For setups ..... 10

For user stored PVF values ..... 10

For standard cable parameters ..... 30

**General specifications**

Power supply

Internal rechargeable lithium-ion battery pack

Operation time ..... min. 10 hours

Charging (without taking the battery pack out)

From 230 V mains .....with mains adapter

From 12 V car battery ..... with car adapter (option)

Charging time..... approx. 3 hours

Display ..... 320x240 color TFT LCD

Connectors

For mains or 12V car adapter .. 2.1/5.5 mm socket

Line connectors.....3 pieces of BNC sockets.

50, 75, 93 Ohm

USB-MIC/B .....to connect PC or memory stick

Ambient temperature ranges

Normal operation .....-10 to +50°C

Rel. humidity ..... 30% to 75% (<25g/m<sup>3</sup>)

Limits of operation .....-10 to +50°C

Rel. humidity ..... 5% to 95% (<29g/m<sup>3</sup>)

Storage and transport .....-20 to +70°C

Rel. humidity ..... 55% at +45°C (<35g/m<sup>3</sup>)

Protection.....IP 54

Shockproof..... EN 60068-2-27 Shock

Dimensions ..... 200 x 100 x 40 mm

Weight..... 0.8 kg

**ORDERING INFORMATION****TIME DOMAIN REFLECTOMETER****ETDR 10 A-C**

464-000-004

Operating manual

Short form operation instructions

Calibration Certificate

Measuring cable (50 Ohm)

Measuring cable (75 Ohm)

Measuring cable (93 Ohm)

USB Stick

USB cable & OTG cable

Mains adapter

Battery pack (built in)

PC software for data transfer

Carrying case

HW Option

Car lighter power adapter EAA 20 .... 462-000-000

ELEKTRONIKA reserves the right to change specifications without prior notice !

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