



## 1. TECHNICAL SPECIFICATIONS

### WIRE MAPPING (Twisted pairs cables , RJ45 connector)

| ERROR SITUATIONS DETECTED |   |         |                |   |         |
|---------------------------|---|---------|----------------|---|---------|
| OPEN PAIR                 | 1 | _____ 1 | SHORTED CABLES | 1 | _____ 1 |
|                           | 2 | - - 2   |                | 2 | _____ 2 |
|                           | 3 | _____ 3 |                | 3 | _____ 3 |
|                           | 4 | _____ 4 |                | 4 | _____ 4 |
|                           | 5 | _____ 5 |                | 5 | _____ 5 |
|                           | 6 | _____ 6 |                | 6 | _____ 6 |
|                           | 7 | _____ 7 |                | 7 | _____ 7 |
|                           | 8 | _____ 8 |                | 8 | _____ 8 |
|                           | S | _____ S |                | S | _____ S |
| REVERSED PAIR             | 1 | _____ 1 | CROSSED PAIRS  | 1 | _____ 1 |
|                           | 2 | _____ 2 |                | 2 | _____ 2 |
|                           | 3 | _____ 3 |                | 3 | _____ 3 |
|                           | 4 | _____ 4 |                | 4 | _____ 4 |
|                           | 5 | _____ 5 |                | 5 | _____ 5 |
|                           | 6 | _____ 6 |                | 6 | _____ 6 |
|                           | 7 | _____ 7 |                | 7 | _____ 7 |
|                           | 8 | _____ 8 |                | 8 | _____ 8 |
|                           | S | _____ S |                | S | _____ S |
| SPLIT PAIRS               | 1 | _____ 1 | MISWIRE ERRORS | 1 | _____ 1 |
|                           | 2 | _____ 2 |                | 2 | _____ 2 |
|                           | 3 | _____ 3 |                | 3 | _____ 3 |
|                           | 4 | _____ 4 |                | 4 | _____ 4 |
|                           | 5 | _____ 5 |                | 5 | _____ 5 |
|                           | 6 | _____ 6 |                | 6 | _____ 6 |
|                           | 7 | _____ 7 |                | 7 | _____ 7 |
|                           | 8 | _____ 8 |                | 8 | _____ 8 |
|                           | S | _____ S |                | S | _____ S |

### LENGTH (Cable 50 - 100Ω)

| Range (m) | Resolution (m) | Accuracy       | Propagation |
|-----------|----------------|----------------|-------------|
| 0 ÷ 605   | 0.3            | ± (3%rdg + 1m) | 0.5 ÷ 0.99c |

### PROPAGATION DELAY

| Range (ns) | Resolution (ns) | Accuracy        |
|------------|-----------------|-----------------|
| 0 ÷ 8000   | 1               | ± (3%rdg + 1ns) |

### AVERAGE IMPEDANCE

| Range (Ω) | Resolution (Ω) | Accuracy       |
|-----------|----------------|----------------|
| 35 ÷ 180  | 0.1            | ± (3%rdg + 1Ω) |

### CABLE CAPACITANCE

| Range (nF) | Resolution (nF) | Accuracy         |
|------------|-----------------|------------------|
| 0 ÷ 100    | 1pF             | ± (2%rdg + 20pF) |

### DC LOOP RESISTANCE

| Range (Ω) | Resolution (Ω) | Accuracy       |
|-----------|----------------|----------------|
| 0 ÷ 200   | 0.1            | ± (1%rdg + 2Ω) |

### ATTENUATION, NEXT, RETURN LOSS, ELFEXT

| Frequency range | Resolution | Accuracy       |
|-----------------|------------|----------------|
| 1 ÷ 350MHz      | 0.1dB      | Level III / IV |

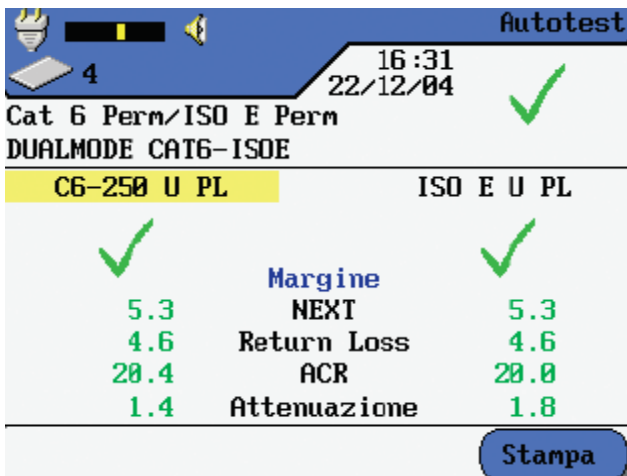
## 2. SPECIAL FEATURES



Extremely easy to use thanks to large LCD VGA colour display with backlight and icons menus selectable with function keys.



Integrated TDR function with graphic visualization at display help user to a rapid analysis of each kind of problem and an accurate localization of trouble on cables.



Innovative and patented **DUAL Mode** function for simultaneous comparisons of Channel or Permanent links on cable of different categories (for example CAT5E and CAT6 cables) in the same response time of a singular test.



Exclusive free exchangeable Channel Adapter modules system with locking mechanism to reduce cost of ownership and create a stable and repeatable testing platform while eliminating bulky adapters that extend beyond the end of the unit.

Possible inserting up to 2 slot Flash cards to extend the internal memory and saving all possible results of test.



PC Windows software to download test results and printing report from internal memory of compact Flash cards. The software is designed to produce **3 different kinds of reports** based on the required level of detail:

- **Single Line Report:** one line for test
- **Brief Report:** a summary of test results with graphical report
- **Detailed Report:** complete test results with graphs for all tests and cable pairs..



### 3. GENERAL SPECIFICATIONS

**General features:**

- Frequency range of signals: up to 350MHz
- Possible upgradeable to other categories
- Cables type supported: UTP/STP/FTP CAT 3/5/5E/6 twisted pairs cables with RJ45 connector ; ISO C/D/E (Channel and Permanent Link) ; Coaxial (BNC) ; 110/66/BIX Blocks ; Singlemode and Multimode Fibres
- Reference standards: ANSI/TIA/EIA 568B, CAT 3/5/5E/6, ISO C/D/E 11801, IEEE802.3 Ethernet, EN50173, EN50173.A1
- AUTOTEST feature for rapid and automatically testing on networks
- Copper integrated TDR feature for cables diagnostics
- TONE feature for troubleshooting closest connectors
- TALK feature for full-duplex remote connection between operators with headphones
- During CAT5E test with saved result: 15s
- During CAT6 test with saved result: 21s
- DUAL Mode test for simultaneously test on different kind of cables
- Standard patchcords to reach the lowest cost of ownership
- Unique Channel Adapter for reducing cost of ownership
- Innovative TRACETEK accessory to perform any test on optical fibres
- Practical "kick stand" for optimum display visibility on the bench
- Power supply with rechargeable batteries with standard adapters
- Expanded internal memory with Compact Flash cards
- Internal memory storage capacity: 6000 test (CAT5E/6 without Graphics) ; 100 test (CAT5E with Graphics) ; 60 test (CAT 6 with Graphics)
- External 64MB Flash card storage capacity: 48000 test (CAT5E/6 without Graphics) ; 800 test (CAT5E with Graphics) ; 480 test (CAT 6 with Graphics)
- PC Windows Software for download saved test and printing final reports

**Power supply:**

- With NiMH, 8.4VCC, 2.45Ah rechargeable batteries
- With AC adapters 230VCA / 12VCC, 800mA
- Life battery: about 8 hours
- Low battery indication

**Display:**

- Display Unit: LCD VGA ¼ inches (320x240 pxls) with backlight
- Remote Unit: LCD with 2 lines of characters and backlight

**PC interfaces:**

- RS-232 D-9pin type
- Standard USB

**Working Temperature / Humidity:**

- 0°C ÷ 50 °C / <90%HR without condense

**Storage Temperature / Humidity:**

- -20°C ÷ 70°C / <90%HR without condense

**Mechanical specifications:**

- Display Unit – Dimensions: 256(L) x 127(W) x 58(H)mm
- Weight Display Unit (with battery): about 1.5kg
- Remote Unit – Dimensions: 256(L) x 127(W) x 58(H)mm
- Weight Remote Unit (with battery): about 1.4kg