

## Cable Expert (Model No.: CE-1000)



NanoTronix Cable Expert (Model No.: CE-1000) is the all-in-one and easy-to-use network qualification unit measuring logical network performance and physical condition of network cables. It allows network engineers to install and maintain efficiently Local Area Networks (LAN) with 10BASE-T and 100BASE-TX based on the Ethernet protocol.

For measuring logical network performance, it provides the round-trip time (RTT) testing to measure network speed under dynamic and static configuration protocol and the IP scanning to show the information on all the terminals connected to a local network. It can also evaluate the capability of link partners such as supported network speed (10BASE-T or 100BASE-TX) and duplexity (half- or full-duplex).

The device provides the physical information of the LAN cable under test such as cable length, faulty positions (open or short) and wire map (open, short, split, crossed and reversed). In particular, with the novel high-resolution graphic TDR (Time-Domain Reflectometer) and TDX (Time-Domain Crosstalk), it is possible for users to locate faulty positions along the cable up to 1km. These TDR and TDX can also be utilized to any type of cables such as Coaxial cables for cable TV and HFC networks and Telephony cables.

In addition, Cable Expert presents tone generating function used to identify cable connection and to trace cable in the walls, floors and ceilings, and continuity testing function to check out continuity of cable.

With the graphic user interface supplied by 128x64 LCD and serial communication port, field engineers can easily apply the device to network testing, transfer the stored data to their PCs and print reports with optional thermal printers. Cable Expert™ has is housed in a rugged ABS enclosure and powered by Li-polymer chargeable battery with 6-hour battery life.



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LAN Measurement	Distance Measurement	<ul style="list-style-type: none"> <li>- Graphic, Numeric TDR / Graphic TDX</li> <li>- Minimum display resolution : 10cm @ VOP 66.7%</li> <li>- Measurement range : up to 300m (graphic), 5m to 300m (numeric)</li> <li>- Distance accuracy : <math>\pm 0.9\%</math> of reading or 0.5m</li> </ul>
	Wiremap Crosstalk Characteristic Impedance Continuity	<ul style="list-style-type: none"> <li>- Open, short, reverse, cross, split fault test</li> <li>- Crosstalk test for 10 base-T, 100 base-TX and 1000 base-T</li> <li>- Graphic display of an approximate impedance</li> <li>- Measurement of continuity lines</li> </ul>
COAX Measurement	Distance Measurement	<ul style="list-style-type: none"> <li>- Graphic TDR / Numeric TDR (optional)</li> <li>- Minimum display resolution : 10cm @ VOP 66.7%</li> <li>- Measurement range : up to 1km (Graphic), 5m to 500m (numeric)</li> <li>- Distance accuracy : <math>\pm 4\%</math> of reading or 0.5m</li> </ul>
Automatic Measurement		<ul style="list-style-type: none"> <li>- Carrying out sequentially the following tests to collect network's physical information <ul style="list-style-type: none"> <li>▪ 10 base-T, 100 base-TX, 1000 base-T</li> <li>▪ Signal performance (crosstalk), continuity</li> </ul> </li> </ul>
Network Analysis		<ul style="list-style-type: none"> <li>- Measuring round-trip time</li> <li>- Link partner ability test (10M half, 10M full, 100M half, 100 full)</li> <li>- Support 10M half, 10M full, 100M half, 100 full duplex</li> <li>- IP scan (IP/MAC address/netbios name)</li> <li>- Link Blink</li> </ul>
Storage		<ul style="list-style-type: none"> <li>- 50ea (automatic test output), 20ea (TDR waveform),</li> </ul>
Tone Generation		<ul style="list-style-type: none"> <li>- 1kHz analog tone signal output</li> </ul>
Display		<ul style="list-style-type: none"> <li>- 2.5" (128 x 64) mono graphic LCD</li> </ul>
Power		<ul style="list-style-type: none"> <li>- 11.1V (Li-polymer, 1800mAh)</li> <li>- 15V / 1A AC-DC adapter</li> <li>- Operating time: 6hours / Recharge time: 4hours</li> </ul>
External Interface		<ul style="list-style-type: none"> <li>- USB, RS-232C, Printer</li> </ul>
Environment		<ul style="list-style-type: none"> <li>- Operating temperature : <math>-15^{\circ}\text{C} \sim +55^{\circ}\text{C}</math></li> <li>- Storage temperature : <math>-20^{\circ}\text{C} \sim +70^{\circ}\text{C}</math></li> <li>- Humidity : 95%</li> </ul>
Safety		<ul style="list-style-type: none"> <li>- EM61010-1 overvoltage CAT II, CAT III</li> </ul>

\* Nanotronix Co., Ltd. reserves the right to change toe specification or design without prior notice.

### Standard Accessories

- |                            |                            |
|----------------------------|----------------------------|
| ① Soft Carrying bag        | ⑦ Alligator clip (RED)     |
| ② Inductive probe          | ⑧ AC-DC adapter (15V / 1A) |
| ③ Remote Identifier #1     | ⑨ BNC to F connector       |
| ④ Download cable (USB-232) | ⑩ User's manual            |
| ⑤ TEST PIN Cable (30Cm)    | ⑪ PC Program CD            |
| ⑥ Alligator clip (BLACK)   |                            |

### Optional Accessories

- ① Remote identifier #2
- ② Remote identifier #3
- ③ Remote identifier #4
- ④ 12V Cigarette lighter charger
- ⑤ Mobile printer