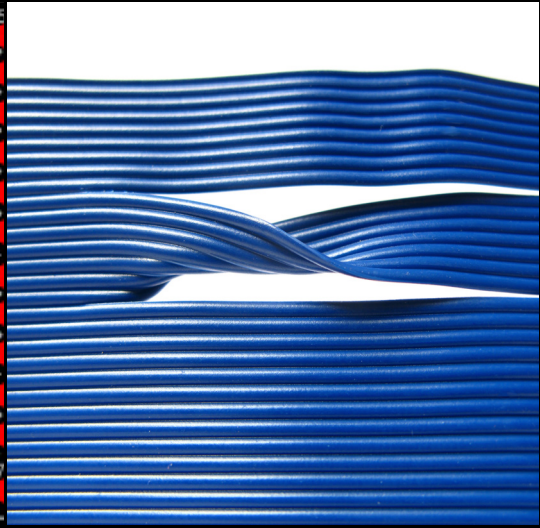
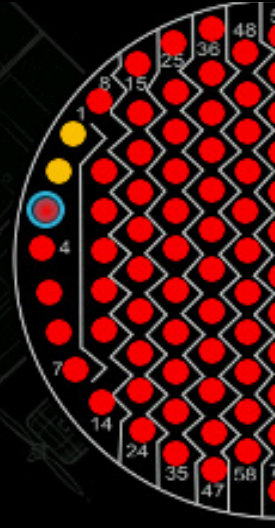




01 Short->002  
 02 Short->001  
 03 Open->003  
 04 Open->004  
 05 Open->005  
 06 Open->006  
 07 Open->007  
 08 Open->008  
 09 Open->009  
 10 Open->010  
 11 Open->011  
 12 Open->012  
 13 Open->013  
 14 Open->014  
 15 Open->015



# Metro.Cable a custom TDR

*in Test we Trust*

**ALBEDO Metro.Cable is a customizable time-domain reflectometer (TDR) capable to characterize and locate faults in metallic cables of any nature including coaxial, twisted pair wire, or special cables used in Power Lines**

Metro.Cable is a hand-held device designed for those companies working with transmission and power cables.

## Near-end adapter

Near-end adapter is a switching matrix that allow the selection of any pair of conductors to execute the TDR test.

## Far-end Active Loop adapter

Far-end adapter communicated with an independent media with the Metro.Cable board can open/close any two circuits, generate a tone or a special impedance.

## Transmission Cables



Metro.Cable can measure cable length, distance to faults, for coaxial, twisted pairs that are being used in Ethernet installations using RJ45 twisted pairs and E1, TV or any other installations using BCN.

**“Any cable can be verified including customer designed cables and avionic circuits**

## Avionics

Metro.Cable is used on aviation wiring for both preventative maintenance and fault location because time domain reflectometry has the advantage of precisely locating the fault location within thousands of miles of aviation wiring.

## Special Power cables

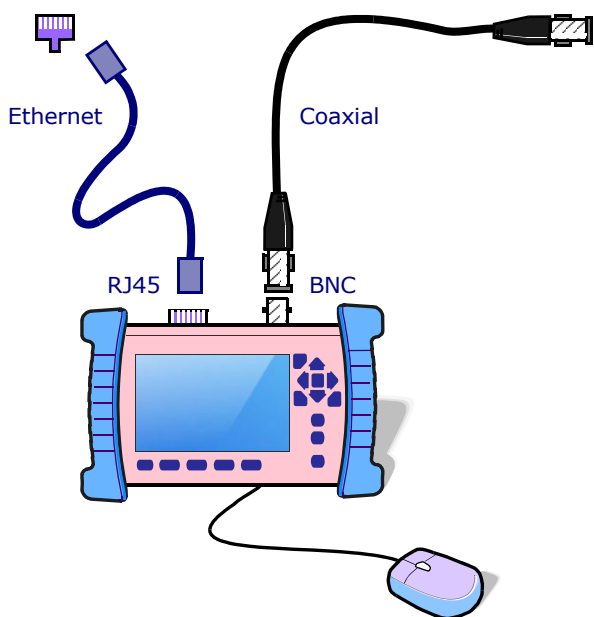


In order to satisfy the necessity of TDR in special cables made of two or any number of conductors, ALBEDO has developed a technology consisting in two adapters the Near-end adapter and the Far-end Active Loop adapter.

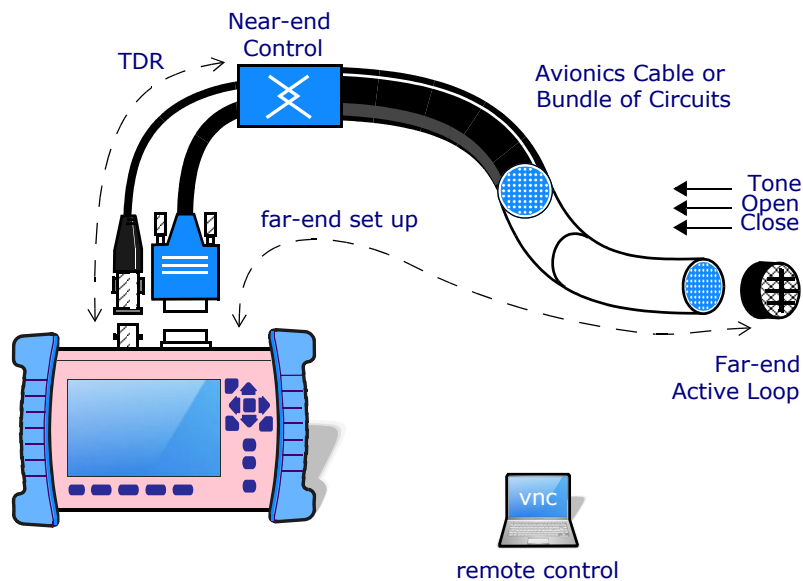
Metro.Cable has the advantage to define new cables by means of near end and far end adapters built specifically for each type of cable.



## TRANSMISSION CABLE TEST



## POWER AND TELECONTROL CABLE TEST



### Functional Specs

TDR	
Interfaces	<ul style="list-style-type: none"> <li>BNC (coaxial)</li> <li>RJ45 (twisted pairs)</li> <li>Customer defined</li> </ul>
Input Impedance	<ul style="list-style-type: none"> <li>BNC 50 Ohm</li> <li>RJ45: 100 Ohm</li> <li>Customer cable: undefined</li> </ul>
TDR	<ul style="list-style-type: none"> <li>Stimulus: Impulse</li> <li>Amplitude: 3 V</li> <li>Impulse width: 100 ns</li> <li>Stimulus Repetition Rate: 300 KHz</li> <li>Step Resolution in free space: 100 mm</li> </ul>
Functions	<ul style="list-style-type: none"> <li>Opens, shorts, splitters, high resistance, bandwidth, impedance</li> </ul>
Operation	<ul style="list-style-type: none"> <li>Sequential test for each n pairs</li> </ul>

Features	
Customizable	<ul style="list-style-type: none"> <li>Type of cable from two to n conductors</li> </ul>
Cable Fault	<ul style="list-style-type: none"> <li>Customer cable wiremap</li> <li>RJ45 cable d &gt; 100 m</li> <li>Coaxial cable d &gt; 100 m</li> </ul>
ESD protection	<ul style="list-style-type: none"> <li>BNC: IEC 61000-4-2* Level 4: ±12 kV</li> <li>RJ45: 1500 Vrms / 0.5 mA / 60 s</li> </ul>
Max Non-Destruct Voltage	<ul style="list-style-type: none"> <li>BNC: ±325 Vdc</li> <li>RJ45: ±3000 Vdc</li> </ul>
Max Input Pulse Voltage	<ul style="list-style-type: none"> <li>+5 Vp</li> </ul>

(\*Standard test condition is IEC61000-4-2 level 4 test circuit with each (AOUT/BOUT) pin subjected to ±12 kV contact discharge for 1000 pulses. Discharges are timed at 1 second intervals and all 1000 strikes are completed in one continuous test run.

Platform	
Hand-held Instrument	<ul style="list-style-type: none"> <li>Touchscreen 480 x 272 TFT, Mouse, USB &amp; Ethernet ports; 1.0 kg, 223 x 144 x 65mm; IP-54</li> <li>Soft LEDs All events at a glance</li> <li>Rechargeable Batteries continuous working up to 12 hours continuous operation. Fast recharging time</li> <li>AC Power Adapter Input: 100 ~ 240 V AC, 50/60 Hz</li> <li>Operating Temperature 0°C ~ 50° C, Storage Temperature -20°C ~ 70°C, Humidity 5% ~ 95%; IP rating 54</li> <li>SNMP, MIB and VNC remote control</li> </ul>

