M Solutions



MS-TestPro

DC Resistance (DCR) Optional Module

The MSolutions DC Resistance and Looper modules for the MS-TestPro can be used to qualify the DC resistance of a CATx link, and to check the cables ability to provide a sufficient level of PoH (Power over HDBaseT) or PoE (Power over Ethernet) to the IEEE 802.3bt standard.

The DCR will check for:

- **1. Loop Resistance** which represents the DC loop resistance in Ohms (Ω) of a cable, and is calculated as the sum of the DC resistance of the two conductors in a pair.
- **2. Parallel DC Resistance Unbalanced** for the parallel resistance of the CATx two conductors in each cable pair. For each pair, the difference is expressed in Ohms (Ω).
- **3. Pair-to-Pair Resistance Unbalanced** which is the difference in DC resistance between all four twisted pairs in the cable. For each pair, the difference is expressed in Ohms (Ω).

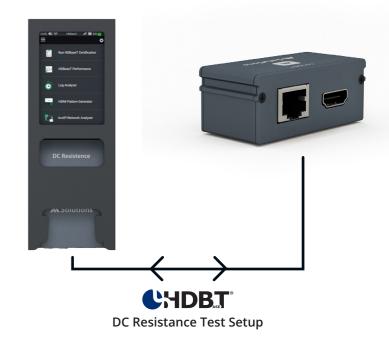


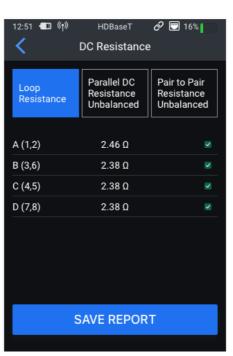
DC Resistance provides a deeper analysis of the infrastructure cabling quality, analyzing each twisted pair. It provides an inner look on the CATx wiring quality and its ability to support a high quality HDBaseT/Ethernet transmission while supplying PoE / PoH with high efficiency.

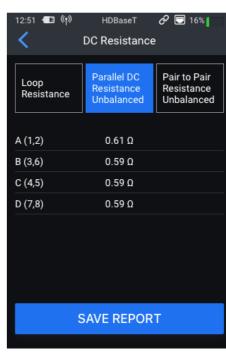
Loop resistance indicates the quality and ability of the individual twisted pair wiring, to transfer the transmitted signal without degradation of the quality.

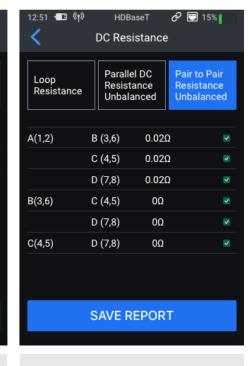
For example: the loop resistance will affect the heat developed on the wires due to power and as a side effect it will influence the crosstalk that leads to transmission degradation.

The DC Resistance module was designed to meet IEEE Standard 802.3-2012, IEEE 802.3bt regulation regarding the CATx quality.









Loop Resistance

Parallel DC Resistance Unbalanced

Pair to Pair Resistance

You can export your results in PDF format report, and also save them locally.