

# WireXpert Series

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Best.nr: 20100398 &amp; 20100402

## CAT6<sub>A</sub>+ Adapter

CAT6<sub>A</sub>+ adapters for the WireXpert Series enable all WireXpert 500, 500-PLUS and 4500 devices to test Direct Current Resistance Unbalance (DCRU) on twisted pair shielded and unshielded LAN cabling additionally to the regular Autotest parameters. CAT6<sub>A</sub>+ adapters also help to identify on shielded cables whether the cable shield is connected to the correct socket.

### APPLICATION DESCRIPTION

With the roll-out of high power PoE (Power over Ethernet) applications up to 60 or 100W, the Direct Current (DC) resistance of twisted pair cabling becomes an important parameter. If the DC resistance of a cable pair is too high and/or the DC resistance between pairs or even within wires of a pair differs too much, the temperature of that pair or wire can increase above the allowed cable or connector specification. As a result, that cabling will suffer accelerated aging or even damaging: Furthermore, there is also a significant risk to lose data due to signal distortion. Therefore, ISO/IEC, TIA and Cenelec have defined testing of DCRU as an optional parameter that can be added to regular cable certification, in case the use of high power PoE is planned for a specific cabling installation.

### FEATURES

- Measures DC Resistance Unbalance between and in pairs of twisted pair LAN cabling in accordance with TIA and IEC specifications
- Allows additionally testing of all regular Autotest parameters such as Insertion Loss, NEXT, Return Loss, ACR-N and ACR-F and related Power-Sum values
- Shield Integrity Test to determine correct connection of the shield to the cabling connections
- Supports testing of crossover cables

**DIREKTRONIK**

Dataprodukter utöver det vanliga

## TECHNICAL SPECIFICATION

**Compatible with**

- WireXpert 500, WireXpert 500-PLUS, WireXpert 4500 with software version 8.100 or higher
- eXport PC documentation software version 8.100 or higher

**Standards Compliance**

- ISO/IEC 11801-1:2017 Class D, E, E<sub>A</sub> Permanent Link and Channel
- EN 50173-1:2018 Class D, E, E<sub>A</sub> Permanent Link and Channel
- IEC 61935-1-2:2019
- TIA568.2-D CAT 3, 5, 5e, 6, 6A Permanent Link and Channel
- ANSI/TIA 1152-A

**Connector**

- Channel Adapter: RJ45 socket
- Permanent Link Adapter: TERA socket (requires an additional measurement cable set *WX\_AC\_6ALCORD2*)

**Measurement of DC loop resistance**

- Range: 0 to 100Ω
- Accuracy: +/- (0.5Ω + 1% of DC loop resistance)
- Resolution: 0.01Ω

**Measurement of DC resistance unbalance within each pair**

- Range: 0 to 100Ω
- Accuracy: +/- (0.025Ω + 0.3% of DC loop resistance for this pair)
- Resolution: 0.005Ω

**Measurement of DC resistance unbalance between pairs**

- Range: 0 to 100Ω
- Accuracy: +/- (0.025Ω + 0.3% of average DC loop resistance for these two pairs)
- Resolution: 0.005Ω

**Cross-Over Cabling Test on**

- 1000Base-T
- 100Base-T

**WireXpert and eXport software**

Version 8.1 or higher

**Environmental conditions**

Same as WireXpert 500, 500-PLUS and 4500

**Weight**

80g per piece



## ORDERING INFORMATION

Article number

228271 Set of 2 CAT6<sub>A</sub>+ DCRU Channel Adapters

**20100398** Includes: 2 DC Resistance Unbalance channel test adapters with RJ45 sockets, soft pouch, QSG

228273 Set of 2 CAT6<sub>A</sub>+ DCRU Permanent Link Adapters

**20100402** Includes: 2 DC Resistance Unbalance permanent link adapters with TERA sockets, soft pouch, QSG

IMPORTANT: Permanent Link measurement cords *WX\_AC\_6ALCORD2* are not included

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For more information please contact:

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Direktronik AB tel. 08-52 400 700 [www.direktronik.se](http://www.direktronik.se)