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## Are you ready for Cat8?

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### CURRENT STATUS OF STANDARDISATION

Recently the two major standardisation bodies, IEC and TIA, announced the releasing of their latest standards for data cables:

- IEC 61156-9/-10, published in April 2016
- TIA 568-C.2-1, published in July 2016

### WHAT DO THESE STANDARDS MEAN EXACTLY?

#### a) *IEC*

IEC 61156-9/-10 describes cables' specifications for channels with transmission characteristics up to 2GHz primarily, intended for channels as defined in ISO/IEC 11801 and in ISO/IEC TR 11801-9901. It covers overall screened cables with screened (X/FTP) or unshielded (X/UTP) pairs, where X stands for F, S or SF, as well as pair-screened cables without overall screen (U/FTP).

Two categories of cables are defined:

- Category 8.1 for use in Class I channels according to ISO/IEC TR 11801-9901
- Category 8.2 for use in Class II channels according to ISO/IEC TR 11801-9901

#### b) *TIA*

TIA 568-C.2-1 describes cabling and components specified for 100  $\Omega$  Category 8 Cabling. It specifies minimum requirements for telecommunications cabling (e.g. channels and permanent links) and components (e.g. cable, connectors, connecting hardware, and equipment cords) that are used up to 2GHz, including the equipment outlet/connector in data centres, equipment rooms, and other spaces that need high speed applications.

These standards are for IEEE 802.3bq applications for 25G and 40GBase-T.

### AESA ATE SOLUTIONS FOR Cat8 CABLE TESTING

AESA offers different ATE (Automatic Test Equipment) solutions fitting the most stringent needs for Cat8:

- System with baluns:
  - Vega 2004: traditional system with external PC and VNA
  - Vega 2004 DT: compact desktop system with embedded PC and VNA
- Balunless system
  - Cobalt 4 DA: extended range of measurement and complete S-Parameter capabilities

All existing Vega systems can be upgraded up to 2 GHz. Please contact AESA for any further information.

### IS YOUR TEST EQUIPMENT READY FOR CAT8 CABLE TESTING?

New standards include new requirements and new test methods. Is your equipment ready to cover them? If you are unsure, please contact your AESA agent (or AESA directly). AESA is ready to provide you with advices as well as with customised best matching test solutions (including quality assessment capabilities by CIQ 3.0 software solution).

For further information please visit [www.aesa-cortailod.com](http://www.aesa-cortailod.com)