

NEW ANSI/TIA STANDARD 568-C.x

EIA/TIA published the 568-C series in September 2008. This series describes the cabling design, installation, and maintenance requirements for twisted pairs and fibre optics.

The 568C series centralizes information found in the various amendments to version 568B in a single document.

The decision to draft this standard arose from the need to have a single document that could be used for generic cabling requirements, when no special circumstances were to be considered, e.g. data centres, industrial, and residential cabling.

It is a well organized, accessible collection of essential information to be used by installation technicians or end users.

Why was the 568-C series created?

The main reason for the creation of the 568-C series is the American National Standard Institute's (ANSI) requirement that published standards be revised, restated, or cancelled every 5 years, and the first TIA 568A series was published in 1991, and the TIA568B series in May 2001. Furthermore, since 568-B was published, there have been:

- 6 amendments to TIA-568-B.1
- 10 amendments to TIA-568-B.2
- 1 amendment to TIA-568-B.3

The new series provides the opportunity to improve the standard because:

- It facilitates the synchronization and update of various documents in a centralized format as part of a single document.

- Avoids the creation of new building cabling standards.
- Makes the standard more generally applicable, whereas it has proven too specific in the past.

Comment se composent les séries 568-C?

EIA/TIA 568-C.O : Generic Telecommunications cabling for customer premises

- EIA/TIA 568-C.1 : Commercial Building telecommunication cabling standard
- EIA/TIA 568-C.2 : Balanced twisted-pair Telecommunications component Standard
- EIA/TIA 568-C.3 : Optical fiber cabling component standard



EIA/TIA 568-C.0 Generic Telecommunica- tions cabling for customer premises	EIA/TIA 568-C.1 Commercial Building telecommunication cabling standard	EIA/TIA 568-C.2: Twisted-pair Telecommuni- cations	EIA/TIA 568-C.3 Twisted-pair Telecommuni- cations Optical fibre cabling
Cabling system structure - Generic topology	Point of entry into building - Design	Mechanical characteristics, Channel, Permanent Link, cable,	Optical fibre cable characteristics - Indoor, outdoor, self-supporting
- Length - Media types (Recognized categories)	- Electric protection -Operator connections Distributors	cord, and connector Colour code Reliability	cable - Wavelengths - Attenuation, multi-mode distortion, lengths
Installation regulations - Tensile strength - Bend radius - Connections - High/Low current separation	- Design - Connection specifications Backbone - Topology	Transmission performance, Channel, Permanent Link, cord, and connector RL, SNEXT,FEXT, ACR-F, ANEXT, delay, coupling attenuation,	Connector and optical bushing characteristics -Duplex and Array (Array= MTP/MPO type multi-fibre)
- Earthing Optical fibre cabling - Measurement device types - Measurement method	- Length Horizontal cabling - Topology/Administration - Length	DC loop resistance/resistance stability Measurement method Links	 Locking mode and fibre positioning Identification Optical jumper characteristics
	- Cords	Connector/cable Temperature considerations	-Simplex, Duplex and Array

What has been changed?

EIA/TIA 568-C.0 :

- New terminology has been invented to describe the various segments and connection points.
- Category 6A has been added as an official medium.
- Optical fibre tests have been added to the document (they were previously in TIA568-C.3).
- The minimum bend radius has changed to 4x cable Æ instead of 8x cable Æ.

EIA/TIA 568-C.1 :

- Category 6A has been added as an official medium.
- "Laser-optimized" 50/125 optical fibre has been added, the equivalent of OM3.
- CAT5 150-Ohm STP and 75-Ohm coax cabling have been removed.

EIA/TIA 568-C.2 :

- Category 5e is recommended for 100Mhz applications (it was previously category 5).
- Category 5 is included as an appendix.
- Permanent Link and Channel performance is described in this document.
- Coupling attenuation has been added.
- Performance equations for all categories are now found in a single table.
- Category 6A has been added.



EIA/TIA 568-C.3:

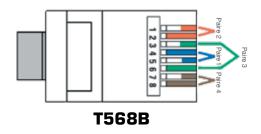
- ISO identification (OMx, OSx, etc.) has been added.
- A new colour coding system based on flows for optical fibres (was only available for copper cables).
- The minimum bandwidth of 62.5µm increases from 160Mhz*Km to 200Mhz*km with a an OFL (overfilled light source = LED, infrared LED)

DO NOT CONFUSE THE STANDARD AND CABLING AGREEMENT NUMBERS

Indeed, the new 568 document series does not set the new cabling agreement. Cables A and B remain

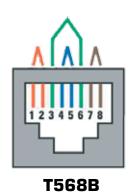
SCHÉMA DE CÂBLAGE

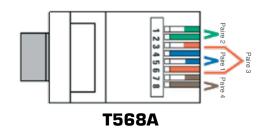
Plugs RJ45 CABLING



Paire 2

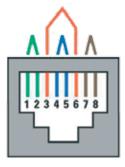
Connecteurs RJ45





Paire 2

Paire 3 Paire 1 Paire 4



T568A

