



**PRODUCT DESCRIPTION**

Zone cables have been designed specifically for the challenges in the data centre environment. They are smaller and lighter than equivalent conventional cables. These cables are designed to be compliant with the IEC and CENELEC standards for 500MHz cabling systems.

Cables can be used in part or all of a cabling channel. When designing links with zone cables the appropriate attenuation factor should be used to calculate the maximum link length. The attenuation factor for these cables is 1.5.

The typical electrical performance of the cable versus the current published and new draft standards is shown in the table:

Characteristic	Typical Headroom vs Cat6 * (1-250MHz)	Typical Headroom vs AC6 * (1-500MHz)
Return Loss	5dB	5dB
Insertion Loss	6%	20%
NEXT	20dB	20dB
PSNEXT	20dB	20dB
ELFEXT	15dB	15dB
PSSELFEXT	15dB	15dB
PSANEXT	NA	20dB
PSAACR-F	NA	20dB

\* 61156-6

Typical headroom on key S/N characteristics - for information only		
PSACR @ 500MHz	NA	35dB
PSAACR-N @ 500MHz	NA	20dB

Because of the screening the cable construction easily passes the performance requirements stipulated in all of the standards when tested to any of the methods described.

The Alien crosstalk performance of cables is assessed using 100m lengths of '6 round' or '4 on a drum' methods.

#### Technical Information

Catalogue Number	Nominal Cable Diameter	Weight	Calorific Value	Acid Gas Emissions	Smoke Index	Safety Rating
AC6 - DCZ	5.4mm	33 Kg/Km	317KJ/M	IEC 60754-2	IEC 61034	IEC 60332-1

NB: Network designers should use an attenuation factor of 1.5 when designing links with these cables.

#### Ordering Information

Catalogue Number	Colour	Length	Reel Size (Flange OD x width)	Weight	Reels per pallet (Euro Pallet)
AC6 - DCZ	Grey or Violet	500m	395 x 315mm	19 Kg/reel	18
		1000m	460 x 395mm	37 Kg/reel	6

#### Applications

Zone cable provides a foundation for building reliable high speed, Local Area Networks to support transmission of Class A, B, C, D, E and EA protocols currently defined in ISO 11801 and EN 50173 and the new draft Class EA protocol from IEEE, 10GBASE-T.

Other applications supported include voice, broadband video and PoE.

#### Cable Standards

##### The cable is compliant with:

- ISO 11801:2002
- ISO 11801:2002 Amm1
- ISO 61156-6
- EN 50173-1:2002
- EN50173-5
- EN 50288-5-2
- ANSI/TIA/EIA 568B
- ANSI/TIA/EIA 568B.2-1
- ANSI/TIA/EIA 568B.2-10

It is also designed to be compliant with the following draft standards when they are published:

- ISO 11801:2002 Amm2
- ISO 61156-6 ed 2
- EN 50173-1:ed2
- EN 50288-10-2

#### PHYSICAL SPECIFICATION

##### Installation recommendations:

- Min bend radius during install: 46 mm
- Min bend radius post install: 23 mm
- Max 10kg tensile load per cable
- Min install temp 0°C
- Max install temp 50°C
- Operational temp rating: -20°C – +60°C

#### ELECTRICAL SPECIFICATION

##### Primary Characteristics:

- Conductor Loop Resistance <29 Ω/100m
- Conductor Resistance Unbalance <2 %
- Capacitance Unbalance to Earth <1200 pF/km
- Insulation resistance ≥500 MΩ.km

##### Secondary Characteristics:

- Mean Characteristic Impedance 100± 5Ω @100 MHz
- NVP 74% @ 10MHz
- Max skew 50ns

The information contained in this document is valid and correct at the time of issue. However, we reserve the right to modify details without notice in the light of subsequent Standard / Specification changes and ongoing technical developments.  
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