

X 25 Year System Warranty

X Lightweight, Compact Design

X Category 6A compliant

## Features

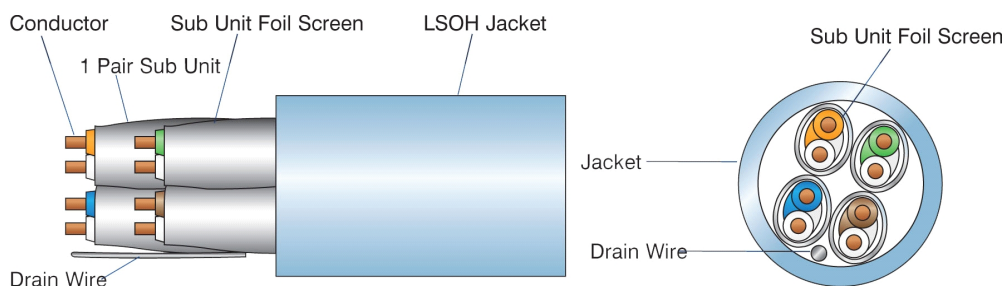
- 25 Year System Warranty
- Category 6A compliant
- Individual foil screen
- Suitable for 10GBASE-T, 10 Gigabit Ethernet Applications
- Supports Power Over Ethernet (POE) Plus
- Lightweight, Compact Design
- Specified to 500MHz
- Low Smoke Zero Halogen Outer Sheath
- No.3 cabling system by market share, as reported by BSRIA

## Product Overview

Excel Category 6A - Augmented Category 6 - cables, and associated connectors, take the performance capabilities of copper infrastructure to new levels. The cable has been designed to exceed the ISO/IEC, TIA and CENELEC for Category 6A/Augmented Category 6 component requirements. This delivers Class EA/Augmented Category 6 link performance over distances of up to 90 metres which supports the applications including 10GBASE-T, 10 Gigabit Ethernet.

Each cable consists of 4 pairs individually wrapped in a covering of high quality, strong, aluminium/polyester foil tape providing an individual screen for each pair. These sub units are then cabled together, with the pairs set to different lay lengths to ensure optimum performance.

Excel Category 6A cables are jacketed in an Ice Blue low smoke zero halogen (LSOH) compound compliant with flame retardant standards as defined in IEC 60332-1, and smoke emission standards IEC61034. Supplied on 500 metre plywood drums, each cable has a print legend identifying the specification, part code and sequential metre marking which counts down from 500 metres to 1 metre, on each drum to reduce waste.



## Performance Overview

Excel Category 6A cables are designed, manufactured and tested in accordance with the ISO and TIA standards for Cat 6A. As such they are suitable for the support of high speed enterprise LAN and data centre applications such as 10 Gigabit Ethernet.

The use of high quality foil tape screens in the design of this cable ensure that correctly installed systems are immune to performance concerns sometimes found in high speed, high frequency copper cable networks. Cables designed with pair screening such as this act against Alien Crosstalk, the inducement of noise from one 4 pair cable to an adjoining (or number of adjoining cables) as well as protecting against signal loss through emissions and enabling immunity from disturbance's which could potentially be received from external sources such as other cables or electronic devices.

## Typical Applications

- 1000BASE-T Gigabit Ethernet
- 10GBASE-T 10 Gigabit Ethernet
- 1.2/2.4Gbps ATM
- Digital and analogue video
- IEEE 802.3af Power over Ethernet (PoE)
- IEEE 802.3at Power over Ethernet Plus (PoE+)

Conductor	23AWG, Solid Plain Copper
Insulation	Foamed Polyethylene
Screen applied to 1 pair unit	Aluminium Foil Tape
Outer Sheath	Flame resistant, Low Smoke Zero Halogen
Outer Diameter	7.25 mm +/- 0.3mm
Installation Temperature Range	0° c to +50° c
Operating Temperature Range	-10° c to +60° c
Minimum Bend Radius during installation	58mm
Minimum Bend Radius during operation	31mm
Flame Retardance	IEC 60332-1
Smoke Emission	IEC 61034
Average weight per metre	0.06 Kg/m
Drum Weight	33 Kg
Drum Size	500m
Drum Dimensions	380mm Diameter x 484mm Width
NVP	76%
Construction	IEC 61156-5 ed2.0 Augmented Category 6A
Coupling Attenuation	30-100 MHz: ≥ 55 dB

Frequency MHz.	Ins. Loss (dB/100m)		Return Loss (dB)		Pair to Pair NEXT ACR-F (dB/100m)		Power Sum NEXT ELFEXT (dB/100m)		Po. Delay (ns/100)		
	Max.	Min.	Min.	Min.	Min.	Min.	Min.	Min.	Max.		
1	2.1		2.0		76.3	71.8	74.3	69.8	75.0	75.0	570
10	6		25		61.3	51.8	59.3	49.8	72.5	58.2	538
16	7.6		25		58.2	47.7	56.2	45.7	70.5	54.1	536
20	8.5		25		56.8	45.8	54.8	43.8	69.5	52.2	536
31.25	10.8		23.6		53.9	41.9	51.9	39.9	67.6	48.3	535
62.5	15.5		21.5		49.4	35.9	47.4	33.9	64.5	42.3	535
100	19.9		20.1		46.3	31.8	44.3	29.8	62.5	38.2	534
200	29.2		18		41.8	25.8	39.8	23.8	58	32.2	534
250	33		17.3		40.3	23.8	38.3	21.8	56.5	30.2	534
300	36.6		16.8		39.1	22.3	37.1	20.3	55.3	28.7	534
400	43.2		15.9		37.3	19.8	35.3	17.8	53.5	26.2	534
450	46.3		15.5		36.5	18.7	34.5	16.7	52.7	25.1	534
500	49.2		15.2		35.8	17.8	33.8	15.8	52	24.2	534

Nominal velocity of propagation (NVP 76%) Note 1: All tests include 401 points swept frequency measurements.  
Note 2: All electrical characteristics are given at 20°C

### Part Number Information

Part No.	Description
100-192	Category 6A Screened U/FTP Cable LSOH Ice Blue 500m Drum

### System Warranty

The Excel System Warranty provides a 25-year product and applications assurance of compliance with the industry performance standard appropriate to the class of cabling installed. The warranty may be applied for by an accredited Excel Partner who has designed, supplied and installed the said system.



Excel is a world-class premium performing end-to-end infrastructure solution - designed, manufactured, supported and delivered - without compromise.

Contact us at [sales@excel-networking.com](mailto:sales@excel-networking.com)

