

Cat 6 U/UTP LSZH Cable



ELAND CABLES &



Eland Product Group: A8N

APPLICATION

A 4 pair high performance cable that consists of twisted pair conductors, used mainly for data transmission. Category 6 is recommended for all new installations, supports a frequency range of up to 250MHz and is designed for transmission speeds of up to 1 gigabit per second (Gigabit Ethernet). For installations where fire, smoke emissions and toxic fumes create a potential risk to life and equipment.

CHARACTERISTICS

Temperature Rating

Fixed: -20°C to +60°C

Minimum Bending Radius

Fixed: 4 x overall diameter Flexed: 8 x overall diameter

CONSTRUCTION

Conductor

Class 1 solid copper conductor

Insulation

HDPE (High Density Polyethylene)

Sheath

LSZH (Low Smoke Zero Halogen)

Core Identification

Pair 1: ● Blue White/Blue
Pair 2: ● Orange White/Orange
Pair 3: ● Green White/Green
Pair 4: ● Brown White/Brown

Sheath Colour

Violet

Note

Outdoor version available

STANDARDS

ISO / IEC 11801, TIA 568C.2

Flame Retardant according to BS EN/IEC 60332-1-2



ISO/IEC 17025 LABORATORY TESTED

This product is subject to the Quality Assurance protocols of The Cable Lab®, an ISO/IEC 17025 accredited cable testing laboratory. Testing includes vertical flame, conductor resistance, tensile & elongation, and dimensional consistency, verified to published standards and approved product drawings.





ISO 14001 Environmental Management ISO 45001 Occupational Health and Safety Management

8578

EMS 67206

OHS 6720

REGULATORY COMPLIANCE

This cable is compliant with European Regulation EN 50575, the Construction Products Regulation.



This cable meets the requirements of the Low Voltage Directive 2014/35/EU and the RoHS Directive 2011/65/EU. RoHS compliance has been tested and confirmed by The Cable Lab® as meeting the requirements of the BSI RoHS Trusted Kitemark™.









DIMENSIONS

| ELAND PART NO. | NO. OF PAIRS | AWG | NOMINAL DIAMETER OVER INSULATION mm | NOMINAL OVERALL DIAMETER | NOMINAL WEIGHT kg/305m box |
|----------------|-----------------|-----|-------------------------------------|--------------------------|-------------------------------|
| A8NFORCE6LSZH | 4 | 23 | 1.03 | 6.1 | 16 |

PERFORMANCE CHARACTERISTICS

| FREQUENCY MHz | ATTENUATION dB/100m | NEXT dB | PS-NEXT dB | RL dB | ELFEXT dB | PS-ELFEXT dB/100m | PHASE DELAY |
|------------------|------------------------|------------|---------------|----------|--------------|----------------------|-------------|
| 1 | 2.03 | 74.3 | 72.3 | 20 | 67.8 | 64.8 | 570 |
| 4 | 3.78 | 65.3 | 63.3 | 23 | 55.8 | 52.8 | 552 |
| 8 | 5.32 | 60.8 | 58.8 | 24.5 | 49.7 | 46.7 | 546.73 |
| 10 | 5.95 | 59.3 | 57.3 | 25 | 47.8 | 44.8 | 545.38 |
| 16 | 7.55 | 56.2 | 54.2 | 25 | 43.7 | 40.7 | 543 |
| 20 | 8.47 | 54.8 | 52.8 | 25 | 41.8 | 38.8 | 542.05 |
| 25 | 9.51 | 53.3 | 41.3 | 24.3 | 39.8 | 36.8 | 541.2 |
| 31.25 | 10.67 | 51.9 | 49.9 | 23.6 | 37.9 | 34.9 | 540.44 |
| 62.5 | 15.38 | 47.7 | 45.4 | 21.5 | 31.9 | 28.9 | 538.55 |
| 100 | 19.8 | 44.3 | 42.3 | 20.1 | 27.8 | 24.8 | 537.6 |
| 200 | 28.98 | 39.8 | 37.8 | 18 | 21.8 | 18.8 | 536.54 |
| 250 | 32.85 | 38.3 | 36.3 | 17.3 | 19.8 | 16.8 | 536.27 |

ELECTRICAL CHARACTERISTICS

| IMPEDANCE (1.0 - 250MHz) ohms | MAXIMUM RESISTANCE OF CONDUCTOR AT 20°C ohms/km | MAXIMUM RESISTANCE UNBALANCE % | |
|----------------------------------|---|--------------------------------|--|
| 100±15 | 95 | 5 | |

The information contained within this datasheet is for guidance only and is subject to change without notice or liability. All the information is provided in good faith and is believed to be correct at the time of publication. When selecting cable accessories, please note that actual cable dimensions may vary due to manufacturing tolerances.