



# Cat 6 U/UTP LSZH Cable



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



## THE CABLE LAB<sup>®</sup>

AN ISO/IEC 17025 AND IECEE CBTL ACCREDITED FACILITY

Our world-class testing facility assures the quality and compliance of this cable through a continuous and rigorous testing regime.



## SUSTAINABILITY COMMITMENT

We are on a journey to Net Zero.

We've committed to near-term emissions reductions and a net-zero target with the Science Based Targets initiative and we're a signatory to the United Nations Global Compact Sustainable Development Goals.

Learn more about embodied carbon and our carbon emissions reduction actions, our comprehensive recycling services, and wider ESG activities for sustainable operations at: [www.elandcables.com/company/about-us/esg-sustainability](http://www.elandcables.com/company/about-us/esg-sustainability)



SCIENCE  
BASED  
TARGETS

**BUSINESS  
AMBITION FOR 1.5°C**



## 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, the RoHS Directive 2015/853/EU and Reach Directive EC 1907/2006. RoHS compliance has been tested and confirmed by The Cable Lab<sup>®</sup>.





## DIMENSIONS

ELAND PART NO.	NO. OF PAIRS	AWG	NOMINAL DIAMETER OVER INSULATION mm	NOMINAL OVERALL DIAMETER mm	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 ns
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.