

# Cat 5E 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 5E supports a frequency range of up to 100MHz 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.

## CONSTRUCTION

### Conductor

Class 1 solid copper conductor

### Insulation

HDPE (High Density Polyethylene)

### Sheath

LSZH (Low Smoke Zero Halogen)

## CABLE STANDARDS

ISO/IEC 11801, TIA/EIA 568-C.2, YD/T1019



The electrical and dimensional properties of this product are measured by the Technical and Quality Assurance department at the Eland Cables laboratory. Cable performance in respect of conductor resistance, construction quality (workmanship), dimensional consistency, and other parameters are verified to published standards and approved product drawings. Conformance to RoHS (Restriction of the use of Hazardous Substances) is determined and confirmed.

## CHARACTERISTICS

### Temperature Rating

Fixed: -20°C to +50°C

### Minimum Bending Radius

Fixed: 5 x overall diameter

Flexed: 9 x overall diameter

### 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

## DIMENSIONS

ELAND PART NO.	NO. OF PAIRS (24 AWG)	NOMINAL DIAMETER OVER INSULATION mm	NOMINAL OVERALL DIAMETER mm	NOMINAL WEIGHT kg/305m box
A8NFORCE5EUTPLS	4	0.88	5	11

## PERFORMANCE CHARACTERISTICS

FREQUENCY MHz	ATTENUATION 20°C dB/100m	NEXT dB	PS-NEXT dB	RL dB	ELFEXT dB	PS-ELFEXT dB/100m	PHASE DELAY ns
1	2	65.3	62.3	20	63.8	60.8	570
4	4.1	56.3	53.3	23	51.8	48.8	552
8	5.8	51.8	48.8	24.5	45.7	42.7	546.73
10	6.5	50.3	47.3	25	43.8	40.8	545.38
16	8.2	47.2	44.4	25	39.7	36.7	543
20	9.3	45.8	42.8	25	37.8	34.8	542.05
25	10.4	44.3	41.3	24.3	35.8	32.8	541.2
31.25	11.7	42.9	39.9	23.6	33.9	30.9	540.44
62.5	17	38.4	35.4	21.5	27.9	24.9	538.55
100	22	35.3	32.3	20.1	23.8	20.8	537.6

## ELECTRICAL CHARACTERISTICS

IMPEDANCE (1.0 - 100MHz) ohms	MAXIMUM DC RESISTANCE OF CONDUCTOR AT 20°C ohms/km	MAXIMUM RESISTANCE UNBALANCE % max
100±15	110	5