

Cat 5E U/UTP PVC 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).

CHARACTERISTICS

Temperature Rating

Fixed: -20°C to +70°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)

Rip Cord

Nylon

Sheath

PVC (Polyvinyl Chloride)

Core Identification

Pair 1:

Blue

White/Blue Pair 2: Orange White/Orange Pair 3: Green White/Green Pair 4:

Brown

White/Brown

Sheath Colour

Grey

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

OHSAS 18001

REGULATORY COMPLIANCE

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 (24 AWG) | NOMINAL DIAMETER OVER INSULATION mm | NOMINAL OVERALL DIAMETER | NOMINAL WEIGHT kg/305m box |
|----------------|--------------------------|-------------------------------------|--------------------------|-------------------------------|
| A8NFORCE5EUTP | 4 | 0.87 | 4.9 | 10 |

PERFORMANCE CHARACTERISTICS

| FREQUENCY MHz | ATTENUATION dB/100m | NEXT dB | PS-NEXT dB | RL dB | ELFEXT dB | PS-ELFEXT dB/100m | PHASE DELAY |
|------------------|------------------------|------------|---------------|----------|--------------|----------------------|-------------|
| 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 (1-100MHz) ohms | MAXIMUM RESISTANCE OF CONDUCTOR AT 20°C ohms/km | MAXIMUM RESISTANCE UNBALANCE % | | |
|------------------------------|---|-----------------------------------|--|--|
| 100±15 | 110 | 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.