

Cat 6 U/UTP PE Cable



Eland Product Group: **A8N**

APPLICATION

A multi-pair 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).

CONSTRUCTION

Conductor

Class 1 solid copper conductor

Insulation

HDPE (High Density Polyethylene)

Sheath

PE (Polyethylene)

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

-20°C to +50°C

Minimum Bending Radius

Fixed: 4 x overall diameter

Flexed: 8 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

● Black

Note

Direct-burial version also available

DIMENSIONS

ELAND PART NO.	NO. OF PAIRS (24 AWG)	NOMINAL DIAMETER OVER INSULATION mm	NOMINAL OVERALL DIAMETER mm	NOMINAL WEIGHT kg/305m box
A8NFORCE6PE	4	1.02	6.7	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	51.3	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	19.80	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

ELAND PART NO.	IMPEDANCE ohms	MAXIMUM RESISTANCE OF CONDUCTOR AT 20°C ohms/km	MAXIMUM RESISTANCE UNBALANCE % max
A8NFORCE6PE	100±15	95	5