

Cat 6 U/UTP SWA LSZH Cable



Eland Product Group: A8N

APPLICATION

An armoured unscreened twisted multi-pair high performance cable, used mainly for data transmission. Category 6 cables support a frequency range of up to 250MHz and 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
60°C

Minimum Bend Radius
8x overall diameter

CONSTRUCTION

Conductor
Class 1 solid Copper

Insulation
Solid PE (Polyethylene)

Filler
LSZH Cross Member

Inner Sheath
LSZH (Low Smoke Zero Halogen)

Armour
SWA (Steel Wire Armour)

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
● Black

STANDARDS

TIA/EIA 568C.2, IEC 11801



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.



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	AWG	NOMINAL DIAMETER OVER CONDUCTOR mm	NOMINAL DIAMETER OVER INSULATION mm	NOMINAL DIAMETER OVER INNER SHEATH mm	NOMINAL DIAMETER OVER ARMOUR mm	NOMINAL OVERALL DIAMETER mm
A8NCAT6UTPSWA	4	23	0.57	1+2C twist	7.1	0.8	11.02

PERFORMANCE CHARACTERISTICS

FREQUENCY MHz	RETURN LOSS DB	ATTENUATION dB/100m	NEXT dB	ACR dB	ELFEXT dB
1	22.60	1.82	67.00	65.00	66.00
4	23.10	2.10	65.00	63.00	63.8
8	23.00	4.30	56.00	51.00	51.7
16	24.50	5.80	51.80	45.00	45.7
25	25.00	6.60	50.00	43.00	43.8
31.25	25.00	8.20	47.00	37.00	39.7
62.50	25.00	9.20	45.00	35.00	37.7
100	24.20	10.23	44.30	32.00	35.8
150	23.30	11.80	43.00	29.00	33.9
200	20.70	17.10	38.00	19.00	27.8
250	19.24	22.00	35.00	9.00	23.8

ELECTRICAL CHARACTERISTICS

IMPEDANCE (1.0 - 250MHz) ohms	MAXIMUM RESISTANCE OF CONDUCTOR AT 20°C ohms/km	VELOCITY RATIO %
100±15	<81.6	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.