



# 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



## THE CABLE LAB®

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)



## 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.