Cat 6A U/FTP LSZH Cable

Eland Product Group: A8N

APPLICATION

A very high performance data cable designed for transmission speeds of up to 10GB per second. These cables allow the use of protocols supported by class EA for the implementation of 10G Base-T. Cat 6A cables support frequency ranges up to 500MHz compatible with PoE & PoE+. For installations where fire, smoke emissions and toxic fumes create a potential risk to life and equipment.

CHARACTERISTICS

Temperature Rating
Fixed: -20°C to +60°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)

Screen
Al/PET (Aluminium/Polyester tape)

Drain Wire
Tinned copper wire of 26AWG

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
Blue

STANDARDS

TiA/EIA 568-B.10, IEC 61158-5

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.

UKAS ISO/IEC 17025 Accredited Testing Laboratory 8578

bsi. ISO 9001 Quality Management FS 672069 | ISO 14001 Environmental Management EMS 672067 | ISO 45001 Occupational Health and Safety Management OHS 672066

REGULATORY COMPLIANCE

This cable is compliant with European Regulation EN 50575, the Construction Products Regulation.

CPR COMPLIANT EN 50575

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™.

bsi. RoHS Trusted KITEMARK™ KM 634267 | RoHS | CE

DIMENSIONS

ELAND PART NO.	NO. OF PAIRS	AWG	NOMINAL DIAMETER OVER INSULATION mm	NOMINAL OVERALL DIAMETER mm	NOMINAL WEIGHT kg/km
A8NFORCE6ALS	4	23	1.33	7.3	48

PERFORMANCE CHARACTERISTICS

FREQUENCY MHz	ATTENUATION dB/100m	NEXT dB	PS-NEXT dB	RL dB	ELFEXT dB	PS-ELFEXT dB/100m	PHASE DELAY ns
1	2.1	74.3	72.3	20	68	65	570
4	3.8	65.3	63.3	23	56	53	552
8	5.3	60.8	58.8	24.5	49.9	46.9	546.7
10	5.9	59.3	57.3	25	48	45	545.4
16	7.5	56.2	54.2	25	43.9	40.9	543
20	8.4	54.8	52.8	25	42	39	542.1
25	9.4	53.3	51.3	24.3	40	37	541.2
31.25	10.5	51.9	49.9	23.6	38.1	35.1	540.4
62.5	15	47.4	45.4	21.5	32.1	29.1	538.6
100	19.1	44.3	42.3	20.1	28	25	537.6
200	27.6	39.8	37.8	18	22	19	536.5
250	31.1	38.3	36.3	17.3	20	17	536.3
300	34.3	37.1	35.1	16.8	18.5	15.5	536.1
500	45.3	33.8	31.8	15.2	14	11	535.6

ELECTRICAL CHARACTERISTICS

DELAY SHEW ns/100m	VELOCITY OF PROPAGATION %	MAXIMUM UNBALANCED-TO-GROUND CAPACITANCE pf/100m	MAXIMUM DC RESISTANCE ohms/100m	MAXIMUM DC CONDUCTOR RESISTANCE UNBALANCE %
≤ 45	68	330	9.38	2

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