Category 6A U/FTP MarineSafe

Datasheet: SS1318-AP-EU-ME ENv1



APPLICATION

Leviton MarineSafe Category 6A U/FTP cables exceed Category 6A performance standards. They are specified to 500MHz and are suitable for use in all Class E_A structured wiring cable systems. The Category 6A U/FTP cable supports 10 Gigabit Ethernet, Gigabit Ethernet, Power Over Ethernet, voice, and broadband video transmissions at frequencies up to 500MHz. Leviton MarineSafe cables are third party certified to meet the requirements of Lloyds Register Type Approval for marine and offshore environments.

FEATURES AND BENEFITS

- 23 AWG solid annealed copper wire
- 4 twisted pairs individually screened and cabled together providing EMI immunity
- Enhanced LSHF* sheath
- CE marked for CPR
- Included in the Leviton Limited 25-Year System Warranty when used in conjunction with Leviton copper connectivity. System warranties are available for qualified projects installed by certified contractors
- Lloyds Register type approved







STANDARDS

- Designed and constructed to give optimum electrical performance to the following standards:
 - ISO/IEC 11801 Class E_A, IEC 61156-5
 - EN50173-1 and EN 50288-10-1
 - ANSI/TIA 568.2-D
- Recommended for PoE standards:
 - IEEE 802.3bt PoE Type 1, 2, 3, 4 (90 watts max)
 - Exceeds IEEE 802.3bt standard up to 0.5 amps per conductor (100 watts) continuously
 - Cisco UPOE, UPOE+ (90 watts max)
 - Power over HDBaseT[™] PoH (95 watts max)

REACTION TO FIRE

Flammability Rating	IEC 60332-1-2, IEC 60332-3-24					
CPR Rating	Eca					
Acid Gas Emission	IEC 60754-2					

PRIMARY ELECTRICAL PARAMETERS

CHARACTERISTIC	SPECIFICATION	TYPICAL PERFORMANCE @ 20°C			
Conductor Loop Resistance	Max 19 Ω/100m	14Ω/100m			
Conductor Resistance Unbalance	Max 2%	0.1%			
Insulation Resistance	>5GΩ.km	>50GΩ.km			
Dielectric Strength	2500 Vdc/2secs	Pass			

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SECONDARY ELECTRICAL PARAMETERS

CHARACTERISTIC	SPECIFICATION	TYPICAL PERFORMANCE @ 20°C			
Velocity of Propagation	<534nsec/100m @ 100MHz	413nsec/100m @ 100MHz			
Delay Skew	Max 45nsec/100m @ 100MHz	4nsec/100m @ 100MHz			
Mean Characteristic Impedance	100Ω +/- 5Ω @ 100MHz	100Ω ± 3Ω @ 100MHz			
Coupling Attenuation	Type 1b	75dB			
Transfer Impedance	Grade 2	28mΩ/m @ 10MHz			

ELECTRICAL PERFORMANCE

Frequency (MHz)	1	4	10	20	100	200	250	500	550
Insertion Loss	Standard	2.1	3.8	5.9	8.4	19.1	27.6	31.1	45.3	N/A
(dB/100m)	Typical	1.9	3.5	5.5	7.8	18.0	26.1	29.4	43.0	45.4
NEVT (AD)	Standard	75.3	66.3	60.3	55.8	45.3	40.8	39.3	34.8	N/A
NEXT (dB)	Typical	100.0	100.0	100.0	100.0	94.3	88.9	87.1	81.7	81.0
DCNEVT (AD)	Standard	72.3	63.3	57.3	52.8	42.3	37.8	36.3	31.8	N/A
PSNEXT (dB)	Typical	97.0	97.0	97.0	97.0	91.3	85.9	84.1	78.7	78.0
ACD E (4D)	Standard	68.0	56.0	48.0	42.0	28.0	22.0	20.0	14.0	N/A
ACR-F (dB)	Typical	90.0	90.0	90.0	84.8	70.8	64.8	62.8	56.8	56.0
PSACR-F (dB)	Standard	65.0	53.0	45.0	39.0	25.0	19.0	17.0	11.0	N/A
PSACK-F (db)	Typical	87.0	87.0	87.0	81.8	67.8	61.8	59.8	53.8	53.0
Return Loss	Standard	20.0	23.0	25.0	25.0	20.1	18.0	17.3	17.3	N/A
(dB)	Typical	27.0	30.0	30.0	30.0	25.1	23.0	22.3	20.2	19.9
DCANEVT (AD)	Standard	67.0	67.0	67.0	67.0	62.5	58.0	56.5	52.0	N/A
PSANEXT (dB)	Typical	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
DCAACD E (dD)	Standard	67.0	66.2	58.2	52.2	38.2	32.2	30.2	24.2	N/A
PSAACR-F (dB)	Typical	98.1	96.5	94.5	92.2	82.0	73.9	70.6	57.0	54.6

[•] The standard values shown are the most demanding taken from the relevant IEC, TIA and EN specifications. These standard values are the maximum permittable for Insertion loss and the minimum permittable for other parameters

INSTALLATION

Temperature (Installation)	0°C to +50°C		
Temperature (Operation)	-20°C to +75°C		
Max Tensile Load (Installation)	10kg per simplex cable		
Segregation Class	Class C		

Min Bend Radius (Installation)	8 x Outer Diameter		
Min Bend Radius (Operation)	4 x Outer Diameter		
Field Test NVP Value	0.80		

N/A – Not Applicable

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STANDARD PACKAGING SPECIFICATIONS - REELS

Part Number	Color	Packaging Length (m)	Nominal Cable Diameter (mm)	Nominal Cable Weight (kg/km)	Reel Size Flange Diameter x Width (mm)	Gross Weight (kg/Item)	Items Per Pallet
MarineSafe AC6U/FTP-500BU	Blue*	500	7.4	57.6	400 x 390	31.3	12
MarineSafe AC6U/FTP-1000BU	Blue*	1000	7.4	57.6	600x 405	64.2	4

^{*}Also available in a range of non-standard colors

COUNTRY OF ORIGIN

COO: United Kingdom

"Leviton is **dedicated** to **designing**, **developing** and **manufacturing** sustainable **high-performance** structured cabling and specialty **cabling solutions**."

The information contained in this document is valid and correct at the time of issue. Leviton reserves the right to modify details without notice in light of subsequent standard/specification changes and ongoing technical developments.