

Category 7 S/FTP MarineSafe

Datasheet: GD106463v1

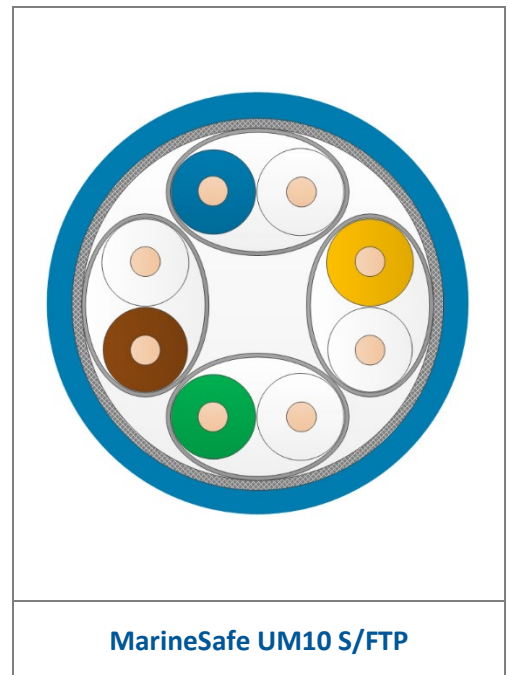


APPLICATION

Leviton MarineSafe Category 7 S/FTP cables exceed the Category 7 performance standards. They are specified to 600MHz and rated to 1000MHz and are suitable for use in all Class F structured wiring cable systems. The applications supported include 10 Gigabit Ethernet, Gigabit Ethernet, Power over Ethernet, and broadband video transmissions at frequencies up to 600MHz. Leviton MarineSafe cables are third party certified to meet the requirements of Lloyd's Register Type Approval for marine and offshore environments.

FEATURES AND BENEFITS

- 23 AWG solid annealed copper wire
- 4 twisted pairs individually shielded and cabled together – providing EMI immunity
- Overall braided screen – for improved shielding efficiency, increased mechanical robustness and heat dissipation
- Enhanced LSHF* sheath
- CE and UKCA 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 optimal electrical performance to the following standards:
 - ISO/IEC 11801 Class F, IEC 61156-5
 - EN 50173-1 and EN 50288-4-1
- 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

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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

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 1	90dB
Transfer Impedance	Grade 1	8mΩ/m @ 10MHz

ELECTRICAL PERFORMANCE

Frequency (MHz)		1	4	10	100	200	250	500	600	1000
Insertion Loss (dB/100m)	Standard (Max)	2.0	3.7	5.9	19.0	27.5	31.0	45.3	50.1	N/A
	Typical	1.9	3.5	5.5	18.0	25.7	28.7	41.1	45.5	60.9
NEXT (dB)	Standard (Min)	80.0	80.0	80.0	72.4	67.9	66.5	61.9	60.8	N/A
	Typical	100.0	100.0	100.0	100.0	100.0	100.0	100.0	95.0	89.0
PSNEXT (dB)	Standard (Min)	77.0	77.0	77.0	69.4	64.9	63.5	58.9	57.8	N/A
	Typical	97.0	97.0	97.0	97.0	97.0	97.0	97.0	92.0	86.0
ACR-F (dB)	Standard (Min)	80.0	80.0	74.0	54.0	48.0	46.0	40.0	38.4	N/A
	Typical	103.9	103.9	102.8	89.4	78.2	74.6	65.2	55.2	50.8
PSACR-F (dB)	Standard (Min)	77.0	77.0	71.0	51.0	45.0	43.0	37.0	35.4	N/A
	Typical	100.9	100.9	99.8	86.4	75.2	71.6	62.2	52.2	47.8
Return Loss (dB)	Standard (Min)	20.0	23.0	25.0	20.1	18.0	17.3	17.3	17.3	N/A
	Typical	27.0	33.1	34.0	39.3	38.4	34.4	28.7	27.1	24.6
PSANEXT (dB)	Typical	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
PSAACR-F (dB)	Typical	98.0	96.4	94.3	81.5	73.2	68.8	55.9	51.1	34.7

- The standard values shown are the most demanding taken from the relevant IEC, TIA and EN specifications. These standard values are the maximum permissible for Insertion loss and the minimum permissible for other parameters
- N/A – Not Applicable

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INSTALLATION

Temperature (Installation)	0°C to +50°C	Min Bend Radius (Installation)	8 x Outer Diameter
Temperature (Operation)	-20°C to +75°C	Min Bend Radius (Operation)	4 x Outer Diameter
Max Tensile Load (Installation)	10kg per simplex cable	Field Test NVP Value	0.80
Segregation Class	Class D		

STANDARD PACKAGING SPECIFICATIONS

Part Number	Color	Packaging Length (m)	Nominal Cable Dimensions (mm)	Nominal Cable Weight (kg/km)	Reel Size Flange Diameter x Width (mm)	Gross Weight (kg/Item)	Items Per Pallet
MarineSafe UM10-500BU	Blue*	500	7.2	54.3	400 x 390	29.7	12
MarineSafe UM10-1000BU	Blue*	1000	7.2	54.3	600x 405	60.8	4

*Alternative colors available

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.