

Description

50 Ohm Coaxial cable

low loss for wireless communication systems

Coaxial Cables

CAVEL®

since 1968

Data Sheet

WL300ZHN



Ø	1,80	4,80	4,97	5,57	7,60
	(Cu)	(PEG/PE)	(Al/Pet/Al/Sur)	(CuSn)	(LSZH)

Construction data

Inner conductor of plain copper	(Cu)	Ø 1,80 ± 0,02	mm
Dielectric of physical foam polyethylene + outer PE skin	(PEG/PE)	Ø 4,80 ± 0,10	mm
Aluminum/Polyester/Aluminum/Surlyne tape longitudinally overlapped and bonded to the dielectric	(Al/Pet/Al/Sur)		
Braid of tinned copper wires	(CuSn)		
Braid optical coverage (IEC 96-1)		84	%
Diameter over Braid		Ø 5,57	mm
Outer sheath of Thermoplastic material - black - halogen-free, low smoke, flame retardant and UV-resistant	(LSZH)	Ø 7,60 ± 0,10	mm

Printed each meter by yellow ink-jet :

CAVEL WL 300 ZHN 50 Ohm LOW LOSS WI-FI/RF - MADE IN ITALY - gggaan - m

(ggg=day)(aa=year)(n=batch) (m=meter marking)

Physical data

Weight of copper conductors	43,90	kg/km
Total weight of cable	83,80	kg/km
Minimum bending radius	75	mm
Maximum cable pulling strength	540	N
Minimum installation temperature	-5	°C
Operating temperature	-25 / +80	°C

Electrical data

Characteristic impedance	50 ± 2	Ohm
Capacitance	78	pF/m
Velocity Ratio	86 %	
Inner conductor resistance	7	Ohm/km
Outer conductor resistance	7,30	Ohm/km
Loop resistance	14,30	Ohm/km
Sheat Insulation voltage (spark test)	5	kV
Maximum current (I _{eff})	18	A
Structural return loss (SRL)	Max. power	
5 - 470 MHz	>30 dB	30 MHz 2.090 W
470 - 1000 MHz	>28 dB	50 MHz 1.620 W
1000 - 2000 MHz	>26 dB	150 MHz 920 W
2000 - 3000 MHz	>22 dB	450 MHz 520 W
		900 MHz 360 W
		1500 MHz 280 W
		1800 MHz 250 W
		2000 MHz 240 W
		2500 MHz 210 W
		5800 MHz 130 W

ITALIANA CONDUTTORI s.r.l.

Viale Zanotti 90 I - 27027 Gropello Cairoli
Tel +39-382.815150 Fax +39-0382.814212

Date

17/11/2021

Responsible

A. Bergaglio

Description

50 Ohm Coaxial cable

low loss for wireless communication systems



Data Sheet

WL300ZHN

Screening Attenuation (SA)

>90 dB

Attenuation (at 20°C)

Frequency [MHz]	Attenuation [dB/100m]	Frequency [MHz]	Attenuation [dB/100m]
50	4,10	1800	27,00
150	7,00	2000	28,60
220	8,60	2500	32,50
450	12,80	4800	47,40
900	18,60	5800	50,00
1500	24,50		

Connectors

- NF300** Series NF Crimp, Crimp, for INDOOR installation, nitin-plated brass
- NM300** Series NM Crimp, Crimp, for INDOOR installation, nitin-plated brass
- SMAF300** Series SMA female, Crimp, for INDOOR installation
- SMAM300** Series SMA male, Crimp, for INDOOR installation

ITALIANA CONDUTTORI s.r.l.

Viale Zanotti 90 I - 27027 Gropello Cairoli
 Tel +39-382.815150 Fax +39-0382.814212

Date

17/11/2021

Responsible

A. Bergaglio