

Description				Data Sheet	
50 Ohm Coaxial cable				WL300ZHN	
low loss for wireless communication systems					
					
Ø	1,80 (Cu)	4,80 (PEG)	4,97 (Al/Pet/Al+Sur)	5,57 (CuSn)	7,60 (LSZH)
Standards					
CEI-UNEL 36762					
Application					
Indoor + Outdoor Installation					
Construction data					
Inner conductor of plain copper		(Cu)	Ø 1,80 ± 0,02	mm	
Dielectric of physical foam polyethylene + outer PE skin		(PEG)	Ø 4,80 ± 0,10	mm	
Aluminum/Polyester/Aluminum+Surlyn 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 (RAL 9011) - 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 - gggaa(n) - m					
(gggaan=batch number m=meter marking)					
Physical data					
Weight of copper conductors			43,90	kg/km	
Total weight of cable			82,50	kg/km	
Minimum bending radius			76	mm	
Maximum cable pulling strength			540	N	
Minimum installation temperature			-5	°C	
Operating temperature			-20 / +80	°C	
Electrical data					
Characteristic impedance			50 ± 2	Ohm	
Capacitance			78	pF/m	
Velocity Ratio			85 %		
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 (Ieff)			18	A	
ITALIANA CONDUTTORI s.r.l.			Date		Responsible
Viale Zanotti 90 I - 27027 Gropello Cairoli			03/08/2023		A. Bergaglio
Tel +39-382.815150 Fax +39-0382.814212					

Description

50 Ohm Coaxial cable

low loss for wireless communication systems

**Data Sheet****WL300ZHN****Structural return loss (SRL)**

5 - 470 MHz	30 dB
470 - 1000 MHz	28 dB
1000 - 2000 MHz	26 dB

Max. power

30 MHz	2.090 W	50 MHz	1.620 W
150 MHz	920 W	220 MHz	760 W
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		

Screening Attenuation (SA)

30 - 1000 MHz	>90 dB
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Attenuation (at 20°C)

Frequency [MHz]	Attenuation [dB/100m]	Frequency [MHz]	Attenuation [dB/100m]
50	4,10	2000	28,00
150	7,50	2500	33,20
220	9,00	3000	36,40
450	13,00	4000	43,30
900	18,60	4800	47,40
1500	25,50	5800	54,00
1800	27,50		

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

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