

Description

50 Ohm Coaxial cable
 low loss for wireless communication systems



Data Sheet

WL300N



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

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 Polyvinylchloride - black - with carbonblack	(PVC)	Ø 7,60 ± 0,10	mm

Printed each meter by yellow ink-jet :

CAVEL WL 300 N 50 Ohm LOW LOSS WI-FI/RF - MADE IN ITALY - gggaaan - 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 50 MHz 1.620 W
470 - 1000 MHz	>28 dB	150 MHz 920 W 220 MHz 760 W
1000 - 2000 MHz	>26 dB	
2000 - 3000 MHz	>22 dB	

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Date

19/05/2017

Responsible

Alberto Scardovi

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Coaxial Cables

CAVEL[®]

since 1968

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Screening Attenuation (SA)

>90 dB

Attenuation (at 20°C)

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

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