

**Description**

50 Ohm Coaxial cable  
 low loss for wireless communication systems



Data Sheet

**WL240N**



Ø	1,40	3,80	3,90	4,38	6,10
	(Cu)	(PEG/PE)	(Al/Pet/Al)	(CuSn)	(PVC)

**Construction data**

Inner conductor of plain copper	(Cu)	Ø 1,40 ± 0,02	mm
Dielectric of physical foam polyethylene + outer PE skin	(PEG/PE)	Ø 3,80 ± 0,10	mm
Outer Aluminum/Polyester/Aluminum tape longitudinally overlapped	(Al/Pet/Al)		
Braid of tinned copper wires	(CuSn)		
Braid optical coverage (IEC 96-1)		78	%
Diameter over Braid		Ø 4,38	mm
Outer sheath of Polyvinylchloride - black - lead-free	(PVC)	Ø 6,10 ± 0,10	mm

Printed each meter by yellow ink-jet :

**CAVEL WL 240 N 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	25,34	kg/km
Total weight of cable	49,40	kg/km
Minimum bending radius	60	mm
Maximum cable pulling strength	360	N
Minimum installation temperature	-5	°C
Operating temperature	-40 / +80	°C

**Electrical data**

Characteristic impedance	50 ± 2	Ohm
Capacitance	82	pF/m
Velocity Ratio	80 %	
Inner conductor resistance	11,20	Ohm/km
Outer conductor resistance	12,40	Ohm/km
Loop resistance	23,60	Ohm/km
Sheat Insulation voltage (spark test)	5	kV
Maximum current (Ieff)	12	A
Structural return loss (SRL)	Max. power	
5 - 470 MHz	>30 dB	30 MHz 1.410 W 50 MHz 1.090 W
470 - 1000 MHz	>28 dB	150 MHz 620 W 220 MHz 510 W
1000 - 2000 MHz	>26 dB	450 MHz 350 W 900 MHz 240 W
2000 - 3000 MHz	>22 dB	1500 MHz 190 W 1800 MHz 170 W
		2000 MHz 160 W 2500 MHz 140 W
		5800 MHz 90 W

**ITALIANA CONDUTTORI s.r.l.**

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 Tel +39-382.815150 Fax +39-0382.814212

Date

**05/06/2017**

Responsible

**Alberto Scardovi**

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Coaxial Cables

**CAVEL**<sup>®</sup>

since 1968

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Screening Attenuation (SA)

&gt;90 dB

## Attenuation (at 20°C)

Frequency [MHz]	Attenuation [dB/100m]	Frequency [MHz]	Attenuation [dB/100m]
50	5,40	1500	30,70
150	9,20	1800	33,90
220	11,20	2000	35,90
450	16,20	2500	40,60
900	23,30	5800	65,20

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