

# Low loss coaxial cable for radio communications

## Characteristics

Diameter	10,3 mm
Impedance	50 Ohm
Attenuation @ 1 GHz/100m	13,4 dB
Attenuation @ 1 GHz/100ft	4,08 dB
f <sub>max</sub>	10 GHz



**AIRCOM PLUS®** is a semi air spaced coaxial cable with excellent electric and mechanical properties. Its low-loss characteristics makes it very suitable for applications up into the microwave range.

**AIRCOM PLUS®** features a unique PE-honeycomb expander which retains the correct impedance even when sharply bent.

The expander provides a tight seal around the solid center conductor which is made from oxygen free copper, thus ensuring it is protected against moisture and corrosion.

Another feature of **AIRCOM PLUS®** is its double shielding which is constructed of overlapping copperfoil plus an additional tightly woven copperbraid resulting in a screening efficiency > 85 dB@1 GHz.

The copperfoil has an applied PE-coating which prevents foil cracking due to short radius bends and the black PVC-sheath of **AIRCOM PLUS®** is UV-stabilized.

**AIRCOM PLUS®** is the 1st choice when a low-loss microwave rated cable is required. It's economical price makes it the clear leader for today's demanding applications.

**AIRCOM PLUS®** is available from stock in the following standard drum sizes:

25m, 50m, 100m, 200m and 500m.

## AIRCOM PLUS® Connectors



Art.-Nr. 7367 N-plug, male



Art.-Nr. 7364 N-plug, female



Art.-Nr. 7379 BNC-plug, male



Art.-Nr. 7382 TNC-plug, male



Art.-Nr. 7384 TNC-RP-plug, male (reverse polarity)



Art.-Nr. 7378 UHF-plug, male

# Technical data

aircom<sup>plus</sup>

AIRCOM PLUS<sup>®</sup> is a registered trademark of SSB-Electronic GmbH.

## Construction

Centre conductor	bare copper, oxygen free 1 x 2,7 mm
Centre conductor Ø	2,7 mm
Dielectric	semi airspaced PE
Dielectric Ø	7,2 mm
Outer conductor 1	copperfoil, PE coated
Shielding factor	100%
Outer conductor 2	copper braid, 75%
Sheath	black PVC, uv-resistant
Outer diameter Ø	10,3 mm

## Mechanical specifications

Weight (100 m)	15 kg
Min. bending radius	55 mm
Temperature range	- 40 .... + 80 °C
Pulling strength	5 daN

## Electrical specifications

Impedance	50 Ohm
Capacity	81 pF/m
Velocity factor	0,83
f <sub>max</sub>	10 GHz
Screening efficiency @ 1 GHz	> 85 dB
DC-resistance	
Centre conductor	3,1 Ohm/km
Outer conductor	6,4 Ohm/km
RF peak voltage	1 kV

## Max. power handling (W @40°C)

10 MHz	3980
100 MHz	1210
500 MHz	510
1000 MHz	340
2000 MHz	180
3000 MHz	150
4000 MHz	110

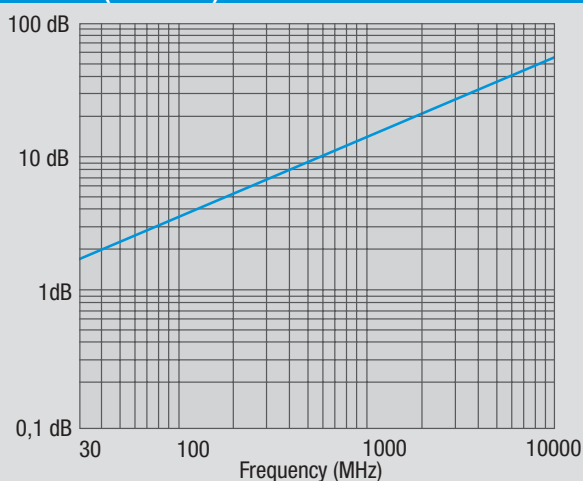
## Typ. attenuation (dB/100m@20°C) dB/100ft @20°C

5 MHz	0,9	0,27
10 MHz	1,2	0,37
50 MHz	2,6	0,79
100 MHz	3,8	1,16
144 MHz	4,6	1,40
200 MHz	5,5	1,68
300 MHz	6,8	2,07
432 MHz	8,4	2,56
500 MHz	9,0	2,74
800 MHz	11,8	3,60
1000 MHz	13,4	4,08
1296 MHz	15,6	4,76
1500 MHz	17,0	5,18
1800 MHz	18,9	5,76
2000 MHz	20,1	6,13
2400 MHz	22,5	6,86
3000 MHz	25,9	7,90
4000 MHz	31,1	9,48
5000 MHz	35,9	10,94
6000 MHz	40,6	12,38
10000 MHz	58,3	17,77

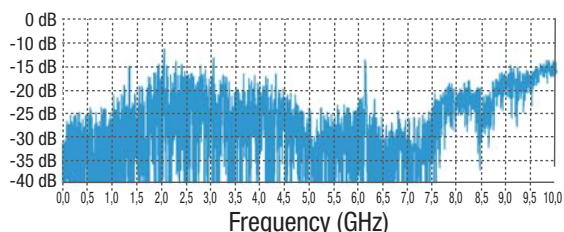
## For your information

	AIRCOM PLUS <sup>®</sup> RG 213/U	RG 58/U
Capacity pF/m	81	101
Velocity factor	0,83	0,66
attenuation dB/100 m		
10 MHz	1,2	2,0
100 MHz	3,8	7,0
500 MHz	9,0	17,0
1000 MHz	13,4	22,5
3000 MHz	25,9	58,5
		118

## Attenuation (dB/100 m) @ 20°C



## Return loss



Due to production tolerances the RTL may have different characteristics

## Accessories

Grounding clamp Art.-Nr. 6085



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