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DESCRIPTION

CABLES



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Several types of cable are available: to ease the choice, we lay out the main differences between them and some general recommendations.

It should be noted that the vast majority of our antennas can be supplied with different cable types than the ones indicated on their datasheet; it is thus strongly recommended to discuss the cable choice with our R&D to make sure to identify the best suited option depending on the distance to be covered and on the operating frequency range.

Microcoax section 1.37

The most convenient among microcoaxial cable types (which range between section 0.81 and 1.48 mm), for it ensures a high mechanical resistance while maintaining a limited size.

It is ideal for applications mounting U.FL compatible, MCX, MMCX or SMA connectors, and for short distances inside sealed boxes.

Impedance: $50 \pm 3 \Omega$

Minimum bending radius: 9 mm

RG178 with PTFE dielectric

The best option in case of applications requiring soldering since the PTFE dielectric prevents possible malfunctions of the cable such as deformation due to overheating during the soldering process.

It is ideal for cable connections through soldering and recommended for short distances inside sealed boxes.

Impedance: $50 \pm 2 \Omega$

Attenuation: about 1.5 dB/m at 1000 MHz

Minimum bending radius: 9 mm

RG174

The cable type most commonly employed for connections through (non soldered) coaxial connectors: it guarantees good mechanical resistance at a good cost.

It is recommended for indoor distances of medium length (a few metres).

It can be replaced by RG316 cable type.

Impedance: $50 \pm 2 \Omega$

Attenuation: about 1 dB/m at 1000 MHz

Minimum bending radius: 15 mm

RG58 (in multiple models)

The cable type most commonly employed in standard civil RF applications, for it results reasonably sturdy while maintaining the cost to a low. Several models are available: with different shielding grades and different galvanic treatments.

It is recommended for medium-length distances, also over 10 metres.

Impedance: $50 \pm 2 \Omega$

Attenuation: about 0.6 dB/m at 1000 MHz

Minimum bending radius: 25 mm

Low Loss Ø5mm

The best cable solution for situations requiring minimal signal attenuation, for high frequency applications or in case of long distances (even over 20 metres).

Impedance: $50 \pm 2 \Omega$

Attenuation: about 0.3 dB/m at 1000 MHz

Minimum bending radius: 25 mm

