

CAB-U.FL/SMA

IQRF SMA Antenna Coaxial Cable

User's Guide



Smarter Wireless. Simply.

Description

CAB-U.FL/SMA is a double ended coaxial cable for connecting an antenna with the SMA connector to IQRF transceiver module with ultra small antenna connector.

Applications

- Connectivity to TR modules with the "C" ordering suffix

Key features

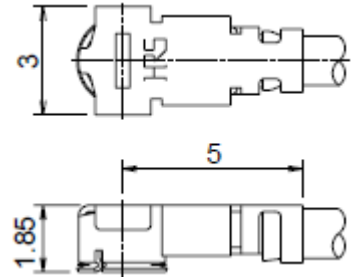
- Double ended cable assembly
- Fits to the KON-U.FL-R-SMT connector
- 5 cm, 15 cm, 50 cm, 100 cm or custom cable length



Parameters	Typical values
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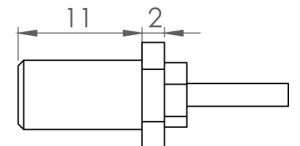
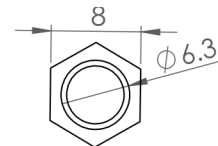
Plug U.FL

Mated height	2.3 mm nom., 2.4 mm max.
Applicable cable	1.37 mm diameter
Weight	71.7 mg
Attenuation	2 dB (for 433 MHz to 916 MHz)



Jack SMA

Gender	Female
Applicable cable	1.37 mm diameter
Screw thread	1/4 - 36UNS
Weight	3.5 g
Attenuation	0.05 dB (for 433 MHz to 916 MHz)



Cable

Jacket diameter	1.37 mm FEP
Inner conductor	7/0.102 mm silver plated annealed copper wire
Dielectric diameter	0.88 FEP
Outer conductor	single shield tin plated annealed copper wire
Impedance	50 Ω
Attenuation	1.6 dB/m (for 433 MHz to 916 MHz)
Length	L = 150 mm ± 4 mm (CAB-U.FL/SMA-15) L = 1000 mm ± 12 mm (CAB-U.FL/SMA-100) Custom specified (CAB-U.FL/SMA-xxx)
Weight	4 g/m

All parameters are for guidance only and should be considered as typical.

Application

Recommended cable lengths

Proper cable length should be selected with respect to RF band and antenna type used. Shortened $\frac{1}{4}$ wave whip antennas must not be used at 433 MHz with 15 cm cable and at 868/916 MHz with 5 cm cable.

Cable type	Length	RF band [MHz]	Usage with TR-7xDC	
			Recommended for	Not recommended for
CAB-UFL-SMA-05	5 cm	433	AN-12, AN-13	
		868 / 916	AN-08, AN-09	AN-06, AN-07
CAB-UFL-SMA-15	15 cm	433	–	AN-12, AN-13
		868 / 916	AN-06, AN-07, AN-08, AN-09	
CAB-UFL-SMA-50	50 cm	433	AN-12, AN-13	
		868 / 916	AN-06, AN-07, AN-08, AN-09	
CAB-UFL-SMA-100	100 cm	433	AN-12, AN-13	
		868 / 916	AN-06, AN-07, AN-08, AN-09	
CAB-UFL-SMA-xxx	Custom			

Product information

Pack list

- CAB-U.FL/SMA Antenna cable, including the nut

Ordering code

- CAB-U.FL/SMA-05 Cable length 5 cm
- CAB-U.FL/SMA-15 Cable length 15 cm
- CAB-U.FL/SMA-50 Cable length 50 cm
- CAB-U.FL/SMA-100 Cable length 100 cm
- CAB-U.FL/SMA-xxx Custom specified cable length

Document history

- 180104 Availability and suitability of cable lengths for given RF band and antenna types revised. Table *Recommended cable lengths* added. A bug in attenuation unit fixed. A bug in *Ordering code* fixed.
- 150826 CAB-U.FL/SMA-05 not available any more
- 150812 Cable lengths revised
- 140703 SMA connector gender added
- 131220 Mechanical drawing of SMA connector added
- 100525 CAB-U.FL-5 added
- 100117 First release

Sales and Service

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Quality management

ISO 9001 : 2009 certified

Complies with Directive 2002/95/EC (RoHS)



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