

RADIATING QUAD CABLE FOR RADIO COVERAGE UP TO 2400 MHz

Standard reference : IEC 61196-4



Application / Features

The fast development of mobile communications and data exchange requires improving the extent of radio coverage, in particular in confined areas such as car parks, malls, buildings, ...

The radiating quad is suited for radio coverage of indoor areas with complex configurations (buildings, sinuous corridors, modular desks and offices, warehouses, car parks, ...).

The **Silec Cable** « Radiating Quad » is a new concept of radiating cable for optimized radio coverage (GSM, UMTS, WiFi, DECT, ...) of buildings and closed areas.

Small and versatile **Silec Cable** RADIATING QUAD is particularly suited for the coverage of dark areas where solutions with traditional antennas fail. The low emission level together with a very good radiated field stability, allows a high level of confidentiality.

Specification

Impedance of the radiating circuit	Ω	50						
Frequency	MHz	30	150	450	900	1800	2200	2400
Attenuation ⁽¹⁾	dB/100 m	6	15	25	35	71	76	77
Coupling loss ⁽¹⁾ at 2m	C50 ⁽²⁾	45	54	64	68	56	59	60
	C95 ⁽²⁾	54	63	75	72	68	72	74
Return loss	dB	from 30 MHz to 2500 MHz : ≤ -14 dB (3)						

Electrical characteristics @ 20°C

Nominal Velocity of Propagation	70	%
Insulation resistance	10000	M Ω .km
Dielectric strength - 1 min	1500	V d.c.

System performance (coupling loss 95 % @ 2 m)

Frequency (MHz)	Cable length (m) for a system loss of 100 dB	Cable length (m) for a system loss of 120 dB	APPLICATION
150	238	368	Security services
450	98	178	Railway services
900	80	137	GSM
1800	44	73	GSM/DECT
2200	37	64	UMTS
2400	34	59	Wireless LAN / WiFi

Other characteristics

Storage temperature	-15°C to +70°C
Service temperature	0°C to +60°C
Laying temperature	-5°C to +40°C (between -5°C & +5°C, a prior storage 24 h at +20 °C is recommended)
Fire behaviour	Compliant to IEC 60332-1 and NFC32070 category C2.

- (1) Characteristics depending on environment and on cable position. Please contact us for more information.
- (2) C50, C95 : 50% and 95% coupling loss probability.
- (3) Excepted for rejection frequencies : 600 / 1300 / 1700 MHz

Note : The radiating quad cables are not suitable for low impedance applications as : heating, lighting, etc... Their packing is marked according to the European Low Voltage Directive (73/23/CEE) 19 February 1973 modified by the directive 93/68/CEE (22 July 1993).

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