DATASHEET CELLULAR ANTENNAS

Smarteq™ LP70x-Series Low-Profile Multiband Antenna

Cellular Antennas (5G, LTE, CBRS, 3G, 2G) - Low Profile Whipless

710379, 710406, 710407



Description

Low-profile, multiband whipless antenna that delivers reliable LTE connectivity.

Technologies

- 2G / 3G / 4G LTE

Features

- Low profile, ergonomic style with sophisticated engineering
- Easy installations
- Combined 2G/3G/4G/LTE functionalities in one single housing
- Ground plane independent

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The Smarteq™ LP70x-Series is a low-profile multiband antenna that operates simultaneously in the 698-960 MHz and 1710-2700 MHz bands with omnidirectional performance. It is designed to be a surface mount that performs well on metallic or non-metallic surfaces. The low-profile housing gives a high degree of vandal resistance, making it perfect for M2M and IoT applications where reliable communications are required.

Features

- Radio system: 2G/3G/4G
- Frequency: 698-960/1710-2690MHz
- Gain: 1.5 / 2.5dBi
- Color: Black or Gray
- Can be mounted on metal and non conductive surfaces
- LP701: Screw mounted / IP65
- LP702: Hole mounted / IP65, when installed
- DC shorted
- IATF 16949

Applications

- Smart Metering
- Smart City
- EV-chargers
- Vending machines
- Parking meters

Certifications

RoHS COMPLIANT

QUALITY SYSTEM CERTIFICATION DNV·GL IATF 16949

ENVIRONMENTAL SYSTEM CERTIFICATION DNV·GL ISO 14001

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SPECIFICATIONS

Smarteq™ LP70x-Series Low-Profile Multiband Antenna

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Standard Configurations

Model	Cable	Cable Length	Connector	Housing Color
710379 (LP701)	RG316	1.5m	SMA-male	Grey
710406 (LP701)	RG316	1.5m	SMA-female	Grey
710407 (LP702)	RG316	1.5m	SMA-male	Black

Electrical Specifications – RF Antennas (All Models)

	VSWR		Max. 3D Gain		Efficiency						
Frequency Ranges	In Free Space	On Metal Plane	In Free Space	On Metal Plane	In Free Space	On Metal Plane	**Nominal Impedance**	**Polarization**	**Radiation Pattern**	**Max Power***	**DC Short**
698 - 760 MHz	< 2.5:1	< 2.5:1	1.5 dBi	2.5 dBi	75%	65%	50Ω	Linear	Omni-directional	20 watts	Yes
790 - 960 MHz	< 2.2:1	< 2.2:1	2.2 dBi	5 dBi	80%	80%					
1710 - 2690 MHz	< 2.0:1	< 2.0:1	4.8 dBi	6 dBi	75%	70%					

Mechanical and Environmental Specifications (All Models)

Physical

Dimensions (L x W x H)		168 x 56 x 42 mm
Weight		~135g
Color		Grey, black
Installation	**LP701**	2 screws/adhesive
	LP702	Center screw/adhesive. Material thickness ≤ 3.5mm, installation hole Ø 16-19mm
Operating / Storage Temperature		-40°C to +85°C
UL Certified		Tested according to EN45545:2013
IP Class		IP65

** Antenna measurement performed with 0.5 meter RG316 cable.*

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CONTACT US

For more information about this product contact your sales representative or visit

> pctel.com/antenna-products

Solving Complex Wireless Challenges

PCTEL is a leading global provider of wireless technology solutions, including purpose-built Industrial IoT devices, antenna systems, and test and measurement products. Trusted by our customers for 29 years, we solve complex wireless challenges to help organizations stay connected, transform, and grow.

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