



LPCA

Combination Antenna

LPCA (Low Profile Combination Antenna) is a rugged, low profile combination antenna designed for use in telematics applications. The antenna is the perfect choice when the application needs a multifunction solution with TETRA, CDMA450, cellular, GPS and WiFi combined for e.g. buses, heavy vehicles, ambulances, forest machines or other M2M applications.

- Configurable design Tetra, CDMA450, Cellular GPS, WIFI
- Low profile, height 50mm
- Ground plane independent
- Rugged
- IP67
- Cable approved acc ECE-R118
- Designed in Sweden in collaboration with the forest industry

Specifications

Electrical

TETRA / CMDA450

Frequencies	TETRA	380-410MHz 410-430MHz
	CDMA450	450-470MHz
Impedance	50Ω	
Polarization	Vertical	
Radiation characteristics	Omni	
VSWR	2:1 *	
Gain	2.15dBi *	
Max power	10W	

Cellular

Frequencies	790-960MHz	1710-2690MHz
Impedance	50Ω	
Polarization	Vertical	
Radiation characteristics	Omni	
VSWR	790-960MHz	3:1 *
	1710-2690MHz	2:1 *
Gain	790-960MHz	2.15dBi *
	1710-2690MHz	3.15dBi *
Max power	10W	

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WIRELESS

Smarteq, based in Stockholm, Sweden, is a leading developer of antennas and antenna systems for increased availability. Smarteq aims towards the market segments industry, energy and vehicles.

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GPS

Frequency	1575.42MHz
Impedance	50Ω
Polarization	RHCP
VSWR	1.5:1 *
Passive gain @ zenith	3.5dBic (on 50x50mm ground plane)
Axial ratio	3dB *
Active gain	29dB
Noise figure	1.2dB
Out of band rejection	>25dB
Supply voltage	3-5V
Typical current consumption	17-19mA

WiFi

Frequencies	2400-2485MHz / 4915-5875MHz
Impedance	50Ω
Polarization	Vertical
Radiation characteristics	Omni
VSWR	1.5:1 *
Gain	2.15dBi *
Max power	10W

Mechanical

Dimensions (L x W x H)	280 x 120 x 50mm	
Installation	Hole mount, Ø19mm and 2 x Ø7mm Installation thickness ≤ 6mm	
Cable	TETRA, CDMA450	615mm RG316
	Cellular	515mm RG316
	GPS	565mm RG316
	WiFi	465mm RG316
Connector	Version 1, 3-6	Fakra(m)
	Version 2	SMA(f)
IP class	IP67	
Temperature	Storage / Operating	-40°C to +85°C

This part is RoHS compliant

Antenna selection guide

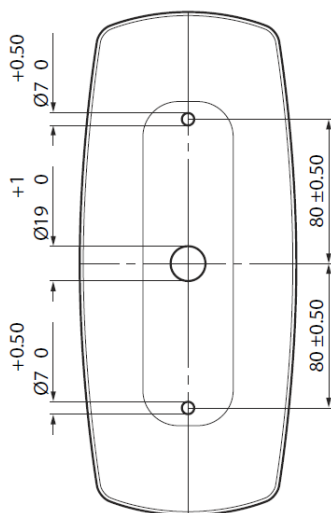
	TETRA 380-410MHZ	TETRA 410-430MHZ	CDMA 450	Cellular	GPS	WiFi
710068 LPCA 1			■	■	■	
710100 LPCA 2	■			■	■	
710130 LPCA 3		■		■	■	
710153 LPCA 4			■	■	■	■
710156 LPCA 5	■			■	■	
710150 LPCA 6		■		■	■	■
710289 LPCA 7			■	■		

*Measurements are made on Ø1m ground plan.

Smarteq reserves the right to change specifications without prior notice.

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