

# LPCA

## Combination Antenna

The antenna family has 10 different configurations



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, GNSS and WiFi combined for e.g. buses, heavy vehicles, ambulances, forest machines or other M2M applications.

- Configurable design Tetra, CDMA450, Cellular, GNSS, 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

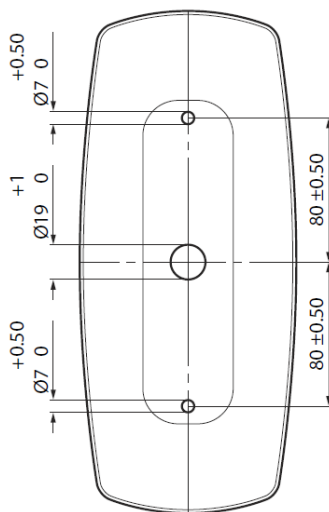
### Electrical

#### TETRA / CMDA450

Frequencies	TETRA	380-410MHz 410-430MHz 430-450MHz
	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	



### GNSS (GPS / Glonass/Galileo)

Frequency	1575-1610 MHz (GPS L1, Glonass L1, Galileo E1)
Impedance	50Ω
Polarization	RHCP
VSWR	<2.0:1 *
Passive gain (peak)	-3.5dBi@fc
Active gain	27dB
Supply voltage	2.8-5.5V
Typical current consumption	15-25mA

### 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
	GNSS	565mm RG316
	WiFi	465mm RG316
Connector	Version 1,3-6	Fakra (m)
	Version 2	SMA(f)
	Version 7	TNC(m)
	Version 8-9	FME(f)
IP class	IP67	
Temperature	Storage / Operating	-40°C to +85°C

This part is RoHS compliant  
Certified according to 2014/53/EU Radio Equipment Directive (RED)

### Antenna selection guide

	TETRA 380-410MHz	TETRA 410- 430MHz	ISM 430-450MHz	CDMA 450 450-470 MHz	Cellular	GNSS	WiFi
710068 LPCA 1				■	■	■	
710100 LPCA 2	■				■	■	
710130 LPCA 3		■			■	■	
710153 LPCA 4				■	■	■	■
710156 LPCA 5	■				■	■	
710150 LPCA 6		■			■	■	■
710289 LPCA 7			■		■		
710494 LPCA 8		■					
710460 LPCA 9				■			

\*Measurements are made on Ø1m ground plan.  
Smarteq reserves the right to change specifications without prior notice

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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