ZGPS Series

L1 GPS with low noise amplifier

The ZGPS series of patch antennas are compact and sensitive with a low noise amplifier to receive very weak signals.

Key Features
Low profile and compact
High sensitivity, high gain
Low noise figure
Water resistant
Magnetic/Adhesive mounting
Excellent temperature stability

Typical Applications
Vehicle GPS
Bluetooth receiver
Vehicle tracking navigation system
AVL/ Fleet management system
External antenna for handheld GPS
External antenna for PDA navigator

ZGPS-FA & ZGPS-FM

ZGPS-SAA & ZGPS-SAM

ZGPS-SCA & ZGPS-SCM

Specifications	ZGPS-F	ZGPS-S	ZGPS-S
Construction	Black polycarbonate cover, rubber gasket		
Connector - fitted	Fakra blue type D	SMA male type A	SMC male type C
Frequency range	L1 GPS 1575.42MHz		
VSWR	2.0 maximum		
Gain	At 90° : 30 ± 4.5 dBi - Cable Loss (-1.2 dB/m)		
Impedance - output	50 Ohms	50 Ohms	50 Ohms
Dimensions	Length: 46mm, Width: 38mm 12.5mm high		
Weight	50grams - excluding cable and connector		
Cable	5 metres RG174A /U - alternative lengths available		
Pulling strength	6kg for 5 seconds with strain relief on connector		
Order code - magnetic	ZGPS-FM	ZGPS-SAM	ZGPS-SCM
Order code - adhesive	ZGPS-FA	ZGPS-SAA	ZGPS-SCA
Mounting position (recommended)	Mount as high on your vehicle or structure as possible, either onto a metallic magnetic surface (magnetic base) or any flat horizontal surface (adhesive base).		

For more details please see following sheet

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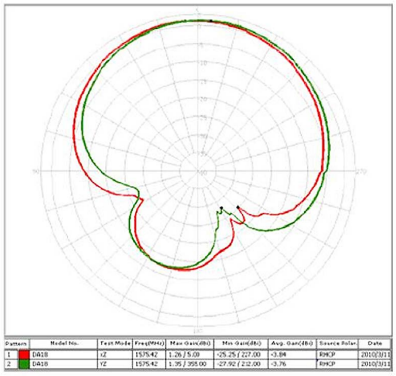
Sample radiation patterns



XY-Plane

Specifications	Antenna Element	
Polarisation	Right-hand circular	
Absolute gain at zenith	3 dBic typical	
Gain	90° : 2.0 dBi minimum 20° : -5.0 dBi minimum	Mounted on a 60mm x 60mm square ground plane
Axial ratio	90° : 3.0 dBi minimum Mounted on a 60mm x 60mm square ground plane	
	Low Noise Amplifier	
Gain	28 dB ± 4.5 dB	
Bandwidth	10MHz mimimum @ S11 ≤ -10dB	
Noise figures	1.5 dB typical	
Supply voltage	2.5 - 5.5 Volts DC	
Current consumption	2.7 - 2.9 Volts : 10.6 mA ± 1 mA 5 Volts : 11.5 mA ± 1 mA	
Output impedance	50 Ohms	
Output VSWR	2.0 maximum	
	Environmental Conditions	
Operating temperature	-40°C to +85°C	
Storage temperature	-40°C to +85°C	
Relative humidity	95% non-condensing	

1 Year Manufacturers Warranty
Terms & Conditions apply.