



Product Data Sheet

LG-VAR

Low Profile Antenna with GPS

C/Note	Doc Issue	Date	Approval
01019	2	03.12.2013	J.J.

UHF

Low Profile Antenna with GPS



LG

Low profile UHF antenna

Rugged design

Does not require a ground plane

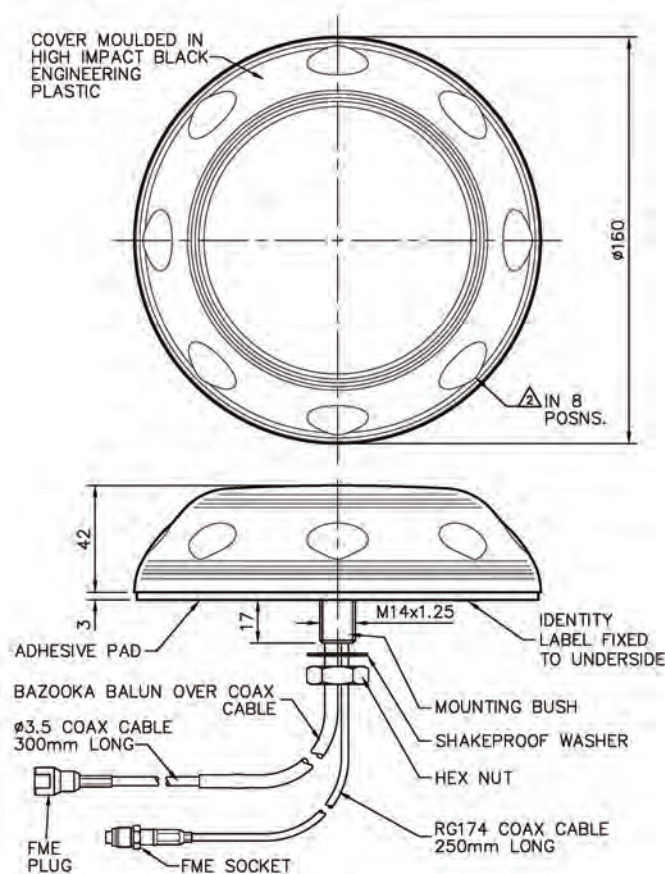
The Panorama low profile UHF antenna range has been designed to perform under extreme pressure. The outer housing is designed to withstand high impacts while maintaining functionality.

The antenna does not require a metallic ground plane and is tuned for mounting on a non-metallic surface as standard.

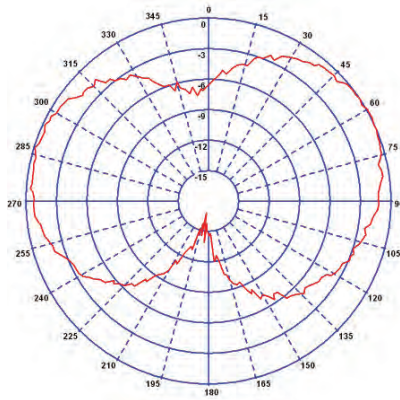
In addition to a low profile UHF element, the LG antenna range contains a high performance GPS antenna with integrated 26dB low noise amplifier.

These features make the LG range ideal for demanding transport and public safety applications.

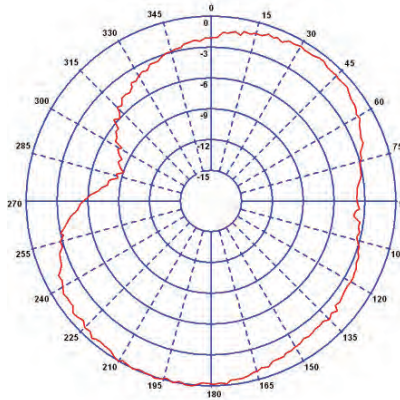
Technical Drawing



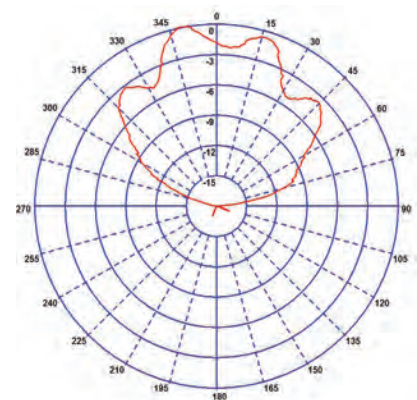
Typical E-Plane LG390 (390MHz)



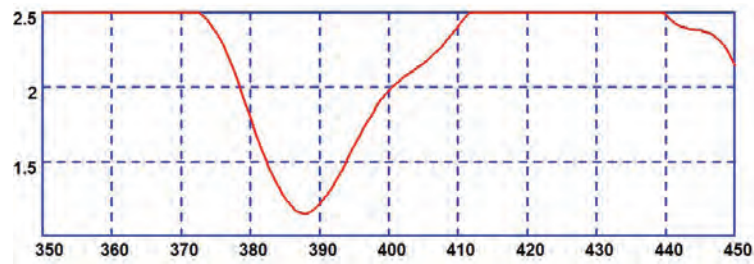
Typical H-Plane LG390 (390MHz)



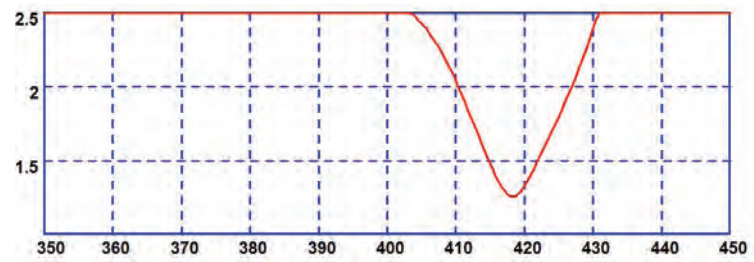
Typical E-Plane GPS



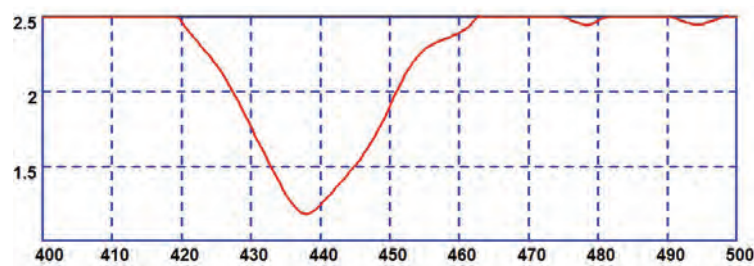
Typical VSWR LG390*



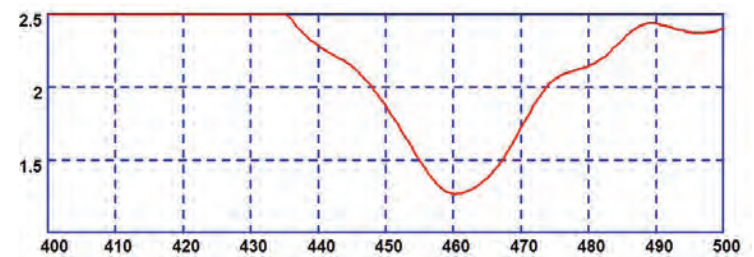
Typical VSWR LG420*



Typical VSWR LG440*



Typical VSWR LG460*



*All VSWR measurements taken in free space with 5m (16') CS23 cable.

UHF

Low Profile Antenna with GPS

Part No.	LG390	LG420	LG440	LG460	
Electrical Data					
Frequency Range (MHz)	380-400	410-430	420-460	450-470	
Operational Band	S1	S2	T2	S4	
Peak Gain: Isotropic	0dBi	0dBi	0dBi	0dBi	
Compared to ¼ wave	-2dB	-2dB	-2dB	-2dB	
VSWR	≤ 2:1	≤ 2.5:1	≤ 2.5:1	≤ 2:1	
Polarisation	Vertical	Vertical	Vertical	Vertical	
Pattern	Omni-directional	Omni-directional	Omni-directional	Omni-directional	
Impedance	50Ω	50Ω	50Ω	50Ω	
Max Input Power (W)	20	20	20	20	
GPS Data					
Frequency Range (MHz)	1575	1575	1575	1575	
VSWR	< 2.0:1 ± 4MHz	< 2.0:1 ± 4MHz	< 2.0:1 ± 4MHz	< 2.0:1 ± 4MHz	
Gain: LNA	26dB	26dB	26dB	26dB	
Polarisation	Right Hand Circular	Right Hand Circular	Right Hand Circular	Right Hand Circular	
Operating Voltage	3 - 5V DC (fed via coax)	3 - 5V DC (fed via coax)	3 - 5V DC (fed via coax)	3 - 5V DC (fed via coax)	
Current	Typical 14mA	Typical 14mA	Typical 14mA	Typical 14mA	
GPS Compliance	EN 301489-1 V.1.8.1, EN 300 440-1 V1.6.1, Product Safety Compliance: EN60950-1				
Mechanical Data					
Dimensions (mm)	Height	42 (1.6")	42 (1.6")	42 (1.6")	42 (1.6")
	Diameter	160 (6.2")	160 (6.2")	160 (6.2")	160 (6.2")
Operating Temp (°C)	-30° / +80°C (-22°/+176°F) -30° / +80°C (-22°/+176°F) -30° / +80°C (-22°/+176°F) -30° / +80°C (-22°/+176°F)				
Material	ASA				
Colour	Black				
Ingress Protection	IP65 (certificate number 6267/2)				
Mounting Data					
Fixing	Panel mount				
Mounting hole size (mm)	14 (0.5")				
Cable Data					
GPS Cable	Type	RG174			
	Diameter (mm)	2.8 (0.11")			
	Length (m)	0.25 (9")			
	Termination	FME socket			
Comms Cable	Type	CS35			
	Diameter (mm)	3.5 (0.1")			
	Length (m)	0.3 (11.8")			
	Termination	FME Plug			

Panorama Antennas Ltd

Frogmore, London, SW18 1HF, United Kingdom

T: +44 (0)20 8877 4444

F: +44 (0)20 8877 4477

E: sales@panorama-antennas.com

www.panorama-antennas.com

Waiver: The data given above is indicative of the performance of the product/s under particular conditions and does not imply a guarantee of performance. These specifications are subject to change without notice.

Copyright © Panorama Antennas Ltd. All rights reserved.

