GPS+GSM Active Antenna Module-Screw mount plus adhesive tape.



Ø75 x 14.1mm

APAMS-106

RoHS/RoHS II compliant
Lead in copper alloy exemption (6c); and Lead in glass exemption (7c-I)

MSL level: Not Applicable

FEATURES:

- Dual Band
- High Reliability/Sensitivity
- Compact Size, Easy to install
- ROHS Compliant

TYPICAL APPLICATIONS:

- GPS navigation
- Vehicle tracking
- Telemetry Applications
- Asset tracking
- Emergency call systems

STANDARD SPECIFICATIONS:

Antenna

Parameters	Min.	Typ.	Max.	Units	Note
Center Frequency	1574.40	1575.42	1576.44	MHz	
Bandwidth	10.0			MHz	
VSWR			1.5:1		
Polarization Model		RHCP			(Right Hand Circular Polarization)
Impedance		50		Ω	
Gain		5		dBic	(Based on 70× 70mm ground plane)
Operating Temperature	-40		+80	°C	
Storage Temperature	-45		+85	°C	

Low Noise Amplifier (LNA)

Parameters	Min.	Typ.	Max.	Units	Note
Center Frequency	1574.40	1575.42	1576.44	MHz	
DC Voltage	2.5	3.0	3.5	V	
Gain	25	26	28	dB	(Without cable +25°C± 10°C)
Output VSWR			2.0		
Noise Figure			1.5		(+25°C ± 10°C)
DC current		10.5	12.5	mA	

Electrical Characteristics (GSM)

Parameters	Min.	Typ.	Max.	Units	Note
Working Frequency	806		960	MHz	
	1710		1880		
Peak Gain			-1	dBi	(@900MHZ)
			1		(@1800MHZ)
VSWR			2:1		
Impedance		50		Ω	
Azimuth		Omni-Directional			
Polarization		Linear Polarization			

30332 Esperanza, Rancho Santa Margarita, California 92688
tel 949-546-8000 | fax 949-546-8001 | www.abracon.com

GPS+GSM Active Antenna Module-Screw mount plus adhesive tape.

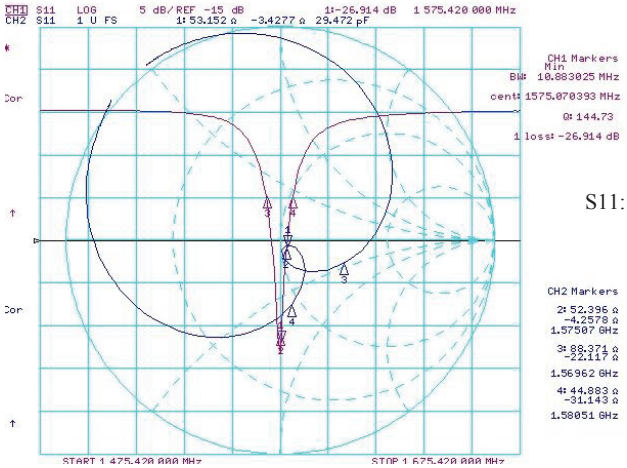
APAMS-106

RoHS/RoHS II compliant
Lead in copper alloy exemption (6c); and Lead in glass exemption (7c-I)



Ø75 x 14.1mm

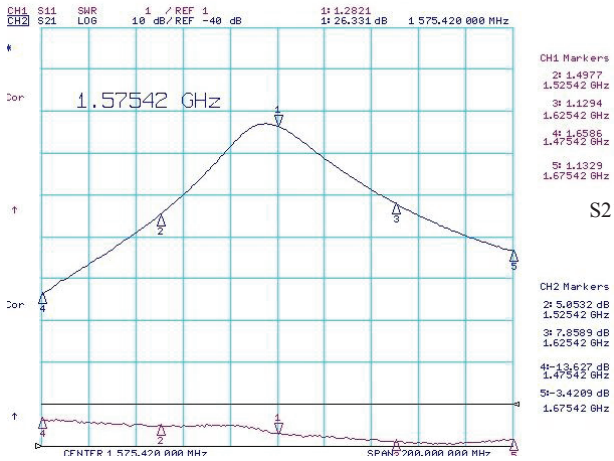
ANTENNA'S IMPEDANCE AND RETURN-LOSS CHARACTERISTICS



S11: Input VSWR

Test condition: 27x27mm ground

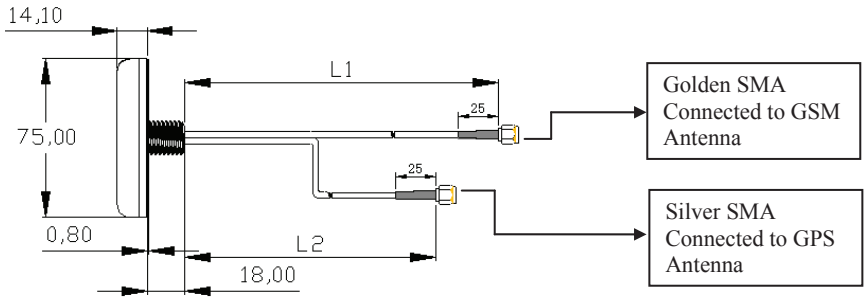
LNA REFLECTION PROFILE



S21: LNA Gain

Test condition: DC 3.0V

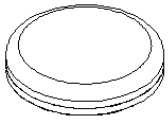
OUTLINE DRAWING:



Parameters	Description
L1(Cable1 Length)	200±10cm
L2(Cable2 Length)	200±10cm
Antenna	Dielectric Ceramics
PCB	FR4
GPS RF Connector	Silver SMA-J3
GSM RF Connector	Golden SMA-J3
Shielding	Tinplate
Thickness	15mm
Mounting Type	Screw Mount plus Adhesive Tape



Bottom View



Top View

Unit:mm

30332 Esperanza, Rancho Santa Margarita, California 92688
tel 949-546-8000 | fax 949-546-8001 | www.abracon.com

GPS+GSM Active Antenna Module-Screw mount plus adhesive tape.

APAMS-106

RoHS/RoHS II compliant
Lead in copper alloy exemption (6c); and Lead in glass exemption (7c-I)



Ø75 x 14.1mm

PRODUCT IMAGE:



PACKAGING:

Each 450 x 400 x 300mm size carton includes 60 pieces of antenna





CAUTION:

(1) Do not apply excess mechanical stress to the component body or terminations. Do not attempt to re-form or bend the components as this will cause damage to the component.
(2) Do not expose the component to open flame.
(3) This specification applies to the functionality of the component as a single unit. Please insure the component is thoroughly evaluated in the application circuit.

ATTENTION: Abracon Corporation's products are COTS – Commercial-Off-The-Shelf products; suitable for Commercial, Industrial and, where designated, Automotive Applications. Abracon's products are not specifically designed for Military, Aviation, Aerospace, Life-dependant Medical applications or any application requiring high reliability where component failure could result in loss of life and/or property. For applications requiring high reliability and/or presenting an extreme operating environment, written consent and authorization from Abracon Corporation is required. Please contact Abracon Corporation for more information.

30332 Esperanza, Rancho Santa Margarita, California 92688
tel 949-546-8000 | fax 949-546-8001 | www.abracon.com