

# Multiband Antenna Module

**APAMPSLJ-142**

RoHS/RoHS II Compliant



92.0 x 52.0 x 157.0 mm

MSL level: Not Applicable

## FEATURES:

- Active GPS & Multiband External Antenna
- Covering Active GPS / GLONASS (1592 - 1610 MHz)
- Cellular: AMPS (850 MHz) / GSM (900 MHz) /DCS (1800 MHz)
- TETRA (380 - 500 MHz) / CDMA (450MHz)
- WIFI / Bluetooth (2.4 GHz)
- Car Fin Type body mount
- 3 coaxial separate output feeds
- LNA Gain: GPS/GLONASS 27dB at 5V
- Cellular Gain 3dBi (max), TETRA Gain 2dBi (max)
- VSWR GSM/TETRA <2.1, GNSS <1.2:1
- RoHS/RoHS II compliant
- 2J Technology

## TYPICAL APPLICATIONS:

- GPS / GLONASS
- TETRA Public Safety
- Vehicle Cellular and 3G / WiFi Routers
- WiFi/Bluetooth
- Mobile broadband

## STANDARD SPECIFICATIONS:

### Antenna

Parameters	Min.	Typ.	Max.	Units	Note
Receiving Frequency	1572		1610	MHz	GPS/GLONASS
	380		500	MHz	Tetra
	824		894	MHz	AMPS
	880		960	MHz	GSM900
	1710		1880	MHz	GSM1800
	1850		1990	MHz	GSM1900
	1920		2170	MHz	GSM2100
	2400		2497	MHz	WLAN/Bluetooth
Gain		2.2		dBi	Cell
		2		dBiC	GPS
		2		dBi	Tetra
VSWR			1.2:1		GPS/GLONASS
			3.5:1		GSM
			2:1		Tetra
Polarization Model	RHCP				GPS/GLONASS
	Vertical				GSM/Tetra
Impedance		50		Ω	
Operating Temperature	-40		+85	°C	

### Low Noise Amplifier (GPS)

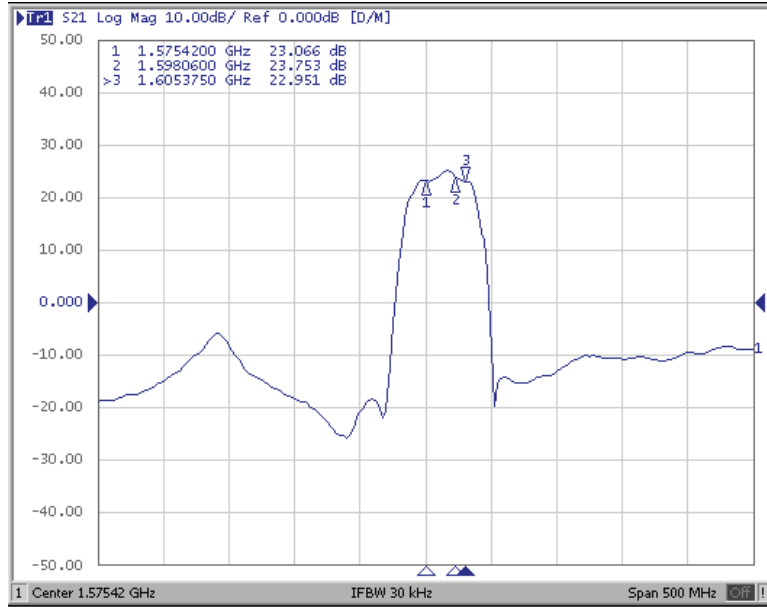
Parameters	Min.	Typ.	Max.	Units	Note
DC Voltage	2.7		5.5	V	
LNA Gain			24	dB	
Current	15		25	mA	
Operating Temperature	-40		+85	°C	



92.0 x 52.0 x 157.0 mm

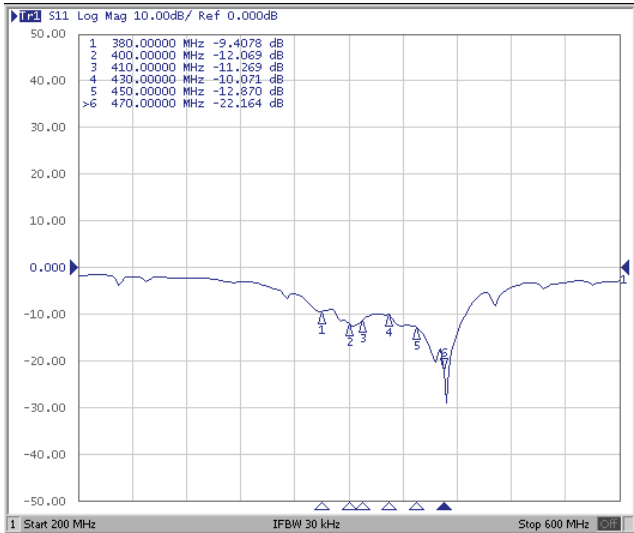
### Antenna's Impedance and Return-Loss Characteristics

#### GNSS

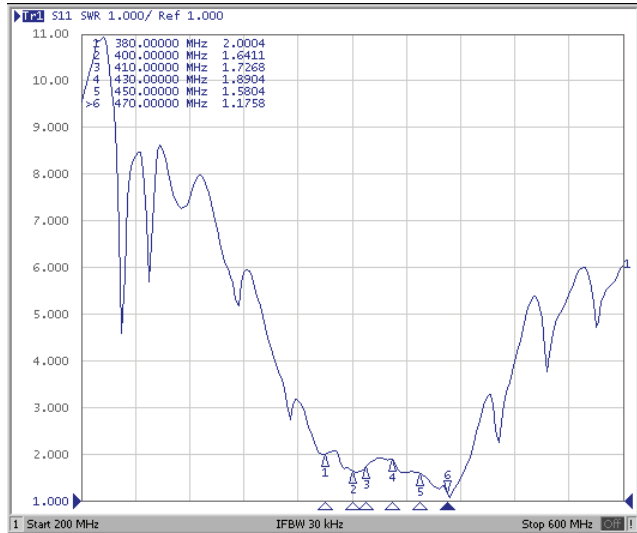


GPS gain (S21) at 3V

#### Tetra



Log Mag (S11)



VSWR (S11)

# Multiband Antenna Module

APAMPSLJ-142

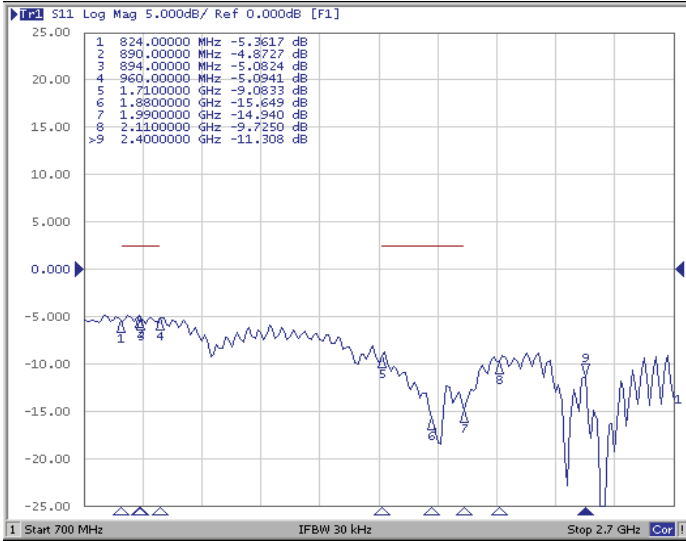
RoHS/RoHS II Compliant



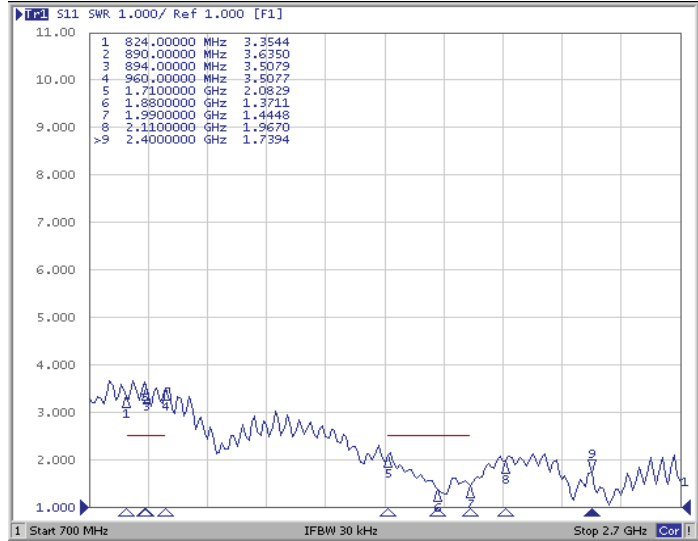
92.0 x 52.0 x 157.0 mm

## Antenna's Impedance and Return-Loss Characteristics

### Cell

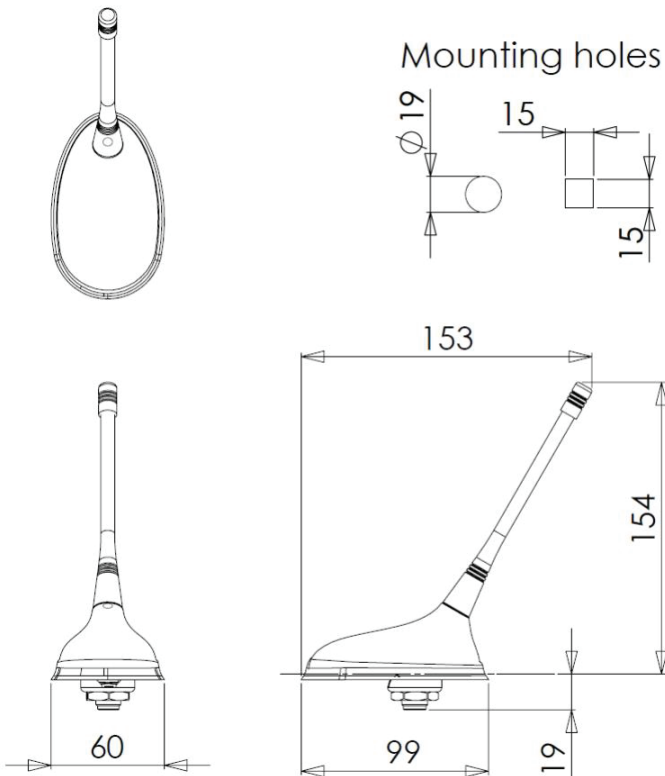


Log Mag (S11)



VSWR (S11)

## OUTLINE DRAWING:



Parameters	Description
RF Connector	SMA male-GPS/GLONASS
	FME female-GSM
	SMA male-TETRA
Weight	250 g
Cable Type	2 x RG174 (GNSS and GSM) 1 x RG58 (Tetra)
Cable Length	250cm

# Multiband Antenna Module

APAMPSLJ-142

RoHS/RoHS II Compliant



92.0 x 52.0 x 157.0 mm

## PACKAGING:

Each antenna is individually packed in a 115x300mm poly bag. 50pcs is the suggested quantity per 470x350x210mm Box.



## 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.

## NOTE:

- 1) The parts are manufactured in accordance with this specification. If other conditions and specifications which are required for this specification, please contact ABRACON for more information.
- 2) ABRACON will supply the parts in accordance with this specification unless we receive a written request to modify prior to an order placement.
- 3) In no case shall ABRACON be liable for any product failure from in appropriate handling or operation of the item beyond the scope of this specification.
- 4) When changing your production process, please notify ABRACON immediately.
- 5) 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.
- 6) All specifications and Marking will be subject to change without notice.

**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.

ABRACON IS  
ISO9001:2008  
CERTIFIED

 **ABRACON**<sup>®</sup> LLC  
The Power of Linking Together

2 Faraday, Suite# B | Irvine | CA 92618 **Revised: 08.03.15**  
Ph. 949.546.8000 | Fax. 949.546.8001  
Visit [www.abracon.com](http://www.abracon.com) for Terms and Conditions of Sale



Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



#### Как с нами связаться

**Телефон:** 8 (812) 309 58 32 (многоканальный)

**Факс:** 8 (812) 320-02-42

**Электронная почта:** [org@eplast1.ru](mailto:org@eplast1.ru)

**Адрес:** 198099, г. Санкт-Петербург, ул. Калинина, дом 2, корпус 4, литера А.