

# PL-866B PL-866BG (DATASHEET)

**Type**  
**Frequencies**

Combined Antenna  
AMPS (824 - 894 MHz)  
GSM (900 MHz)  
GPS (1575.42 MHz)  
GLONASS (1592 - 1610 MHz)  
DCS (1800 MHz)  
PCS (1900 MHz)  
3G (UMTS 2.1 GHz)  
WIFI / BLUETOOTH (2.4 GHz)

**Mounting**  
**Revision**

Body Mount  
02



D.Noble

# 1. PRODUCT SELECTOR

PL-866B      GPS L1 version  
PL-866BG     GPS/GLONASS version

## 2. SPECIFICATION

### 2.1. Electrical Specifications

#### Mobile (Cable 1)

Frequencies	AMPS (824 - 894 MHz) GSM (900 MHz) DCS (1800 MHz) PCS (1900 MHz) 3G (UMTS 2.1 GHz)
Impedance	50 Ohms
Polarization	Vertical
Gain	2.2dBi max.
VSWR	<3:1
Operating temperature	-40°C to +85°C

#### Navigation (Cable 2)

Frequencies	GPS (1575.42 MHz) or GPS/GLONASS (1592 - 1610 MHz)
Impedance	50 Ohms
Noise figure	1.15dB
Polarization	RHCP
LNA Gain	26dB at 3V, 27dB at 5V
VSWR	<1.2:1
Voltage supply	2.7V - 5.5V
Current	15mA - 25mA
Power (max.)	138mW
Operating temperature	-40°C to +85°C

#### Wifi (Cable 3)

Frequencies	WIFI / BLUETOOTH (2.4 GHz)
Impedance	50 Ohms
Polarization	Vertical
Gain	2dBi max.
VSWR	<2:1
Operating temperature	-40°C to +85°C

## 2.2. Connection Specifications

Cable 1 (Mobile):  
Connector type: FME female  
Cable: RG174U  
Cable length: 250 cm

Cable 2 (Navigation):  
Connector type: SMA male  
Cable: RG174U  
Cable length: 250 cm

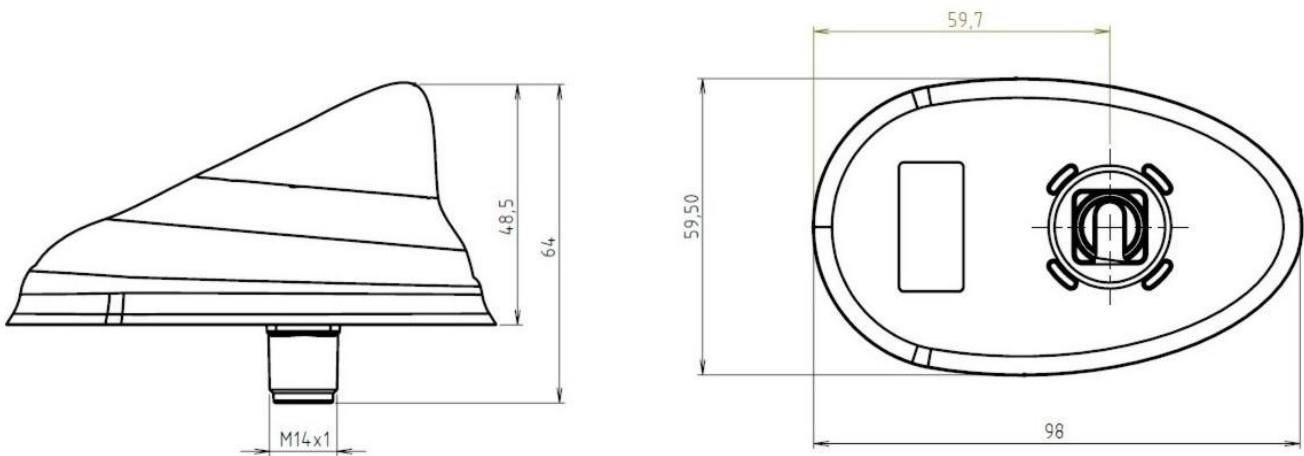
Cable 3 (Wi-Fi):  
Connector type: SMA male  
Cable: RG174U  
Cable length: 250 cm

For different cable length or connector type please ask our sales team.

## 2.3. Mechanical Specifications and Dimensions

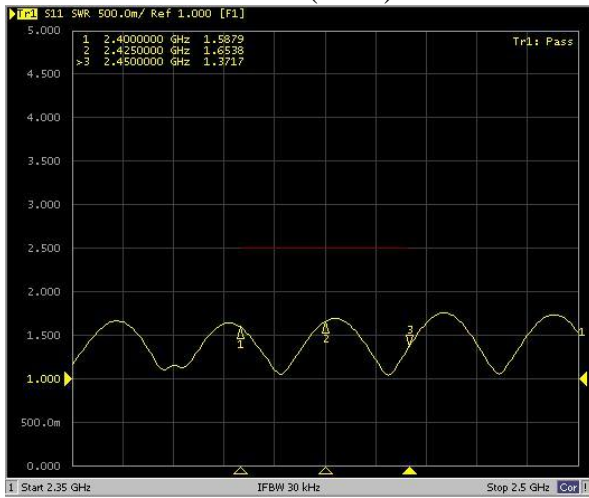
### 2.3.1. Body mount

Material: Lid: ABS / Base: Zamak / Gasket: TPE  
Max. dimensions: 64mm x 98mm x 59.5mm  
Weight: 246 g 'counted with default connection'  
Colour: Black (for different colours please ask our sales team)  
Mounting hole: Square (15 x 15 mm)



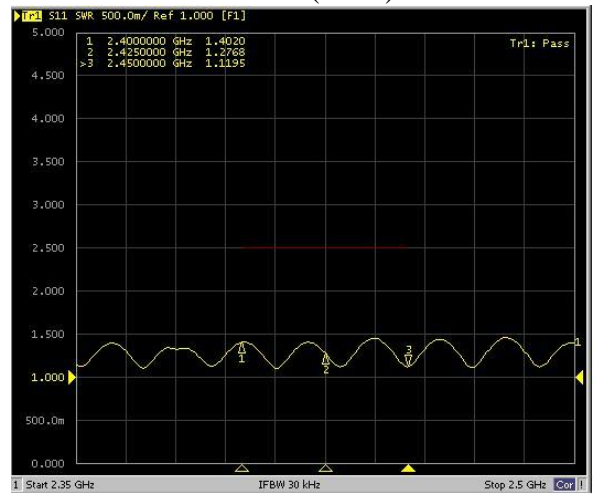
### 3. MEASUREMENT

VSWR (WiFi)



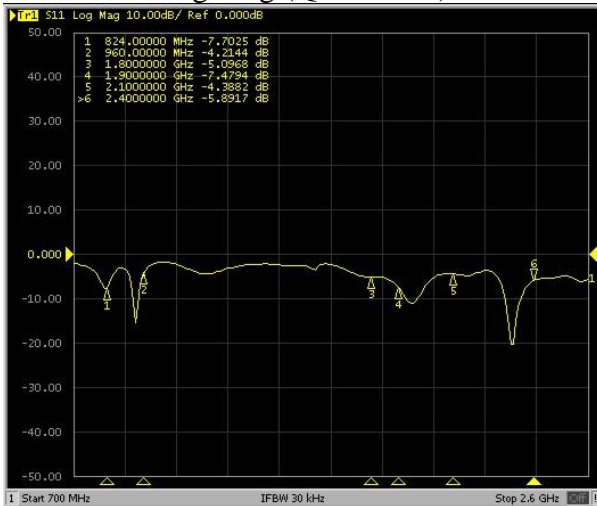
Tested with 3m cable length

VSWSR (WiFi)



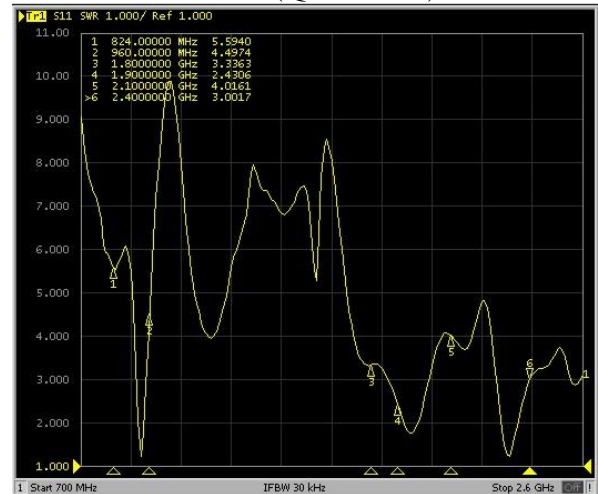
Tested with 5m cable length

Log Mag (Quad Band)



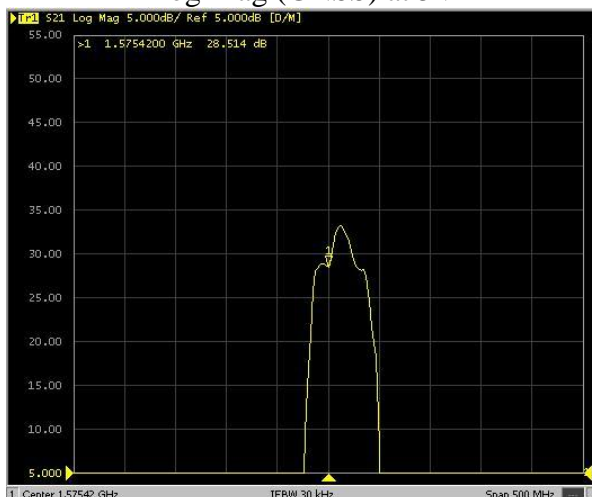
Tested with 30cm cable length

VSWSR (Quad Band)



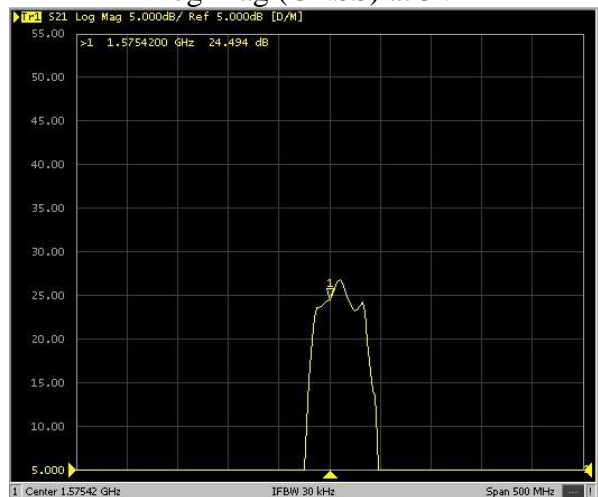
Tested with 30cm cable length

Log Mag (GNSS) at 5V



Tested with 3m cable length

Log Mag (GNSS) at 3V



Tested with 5m cable length

## 4. REVISION LEGEND

Revision	Description	Approved By
00	Initial version	
01	Added 3G(UMTS 2.1GHz) frequency for GSM band	Tipul, Noble
02	Added AMPS (824 - 894 MHz) frew for GSM band	Tipul, Noble

## 5. IMAGES

