

# MDL GPS/GLONASS 3V0 SMA PLUG RG-174 10M 6 GPSGLONASS02G-S3-03-A

## 1. Application:

This application shall apply for antenna unit which shall be used with an engine for an automobile. (for impedance 50Ω)

## 2. Appearance:

Antenna Unit (with radome, connector, and cable – refer to an attached drawing)

Dimensions	49.65*45.13*17.19mm	;	Radome	#G
Weight	210 g (typ.)	;	Connector	SMA PLUG
Cable	RG174 10M	;		

## 3. Operating Condition:

Temperature -40 to +90°C

## 4. Storage Condition:

Temperature -40 to +90°C  
Humidity 65±20 % RH

## 5. Electrical Specification:

\* All value are defined at 25±15°C, 65±20 % RH, power handling 1 u watt, air pressure 960 ±100 HPA unless otherwise noted.

\* Patch characteristics are measured with 70x70 mm ground plane in an anechoic chamber.

### 5-1 Patch

Characteristics	Specification
Frequency Domain	1575MHz~1615MHz
Center Frequency	1593±5 MHz
Bandwidth (10dB return loss)	43 MHz typ
Average Gain	2.0 dBic typ.
Polarization	R.H.C.P.

### 5-2 Filter / LNA

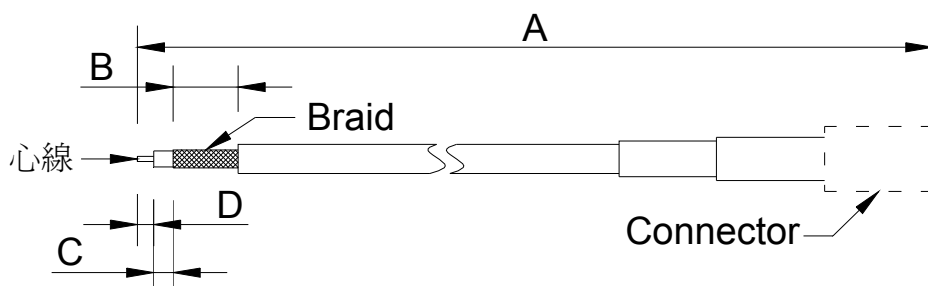
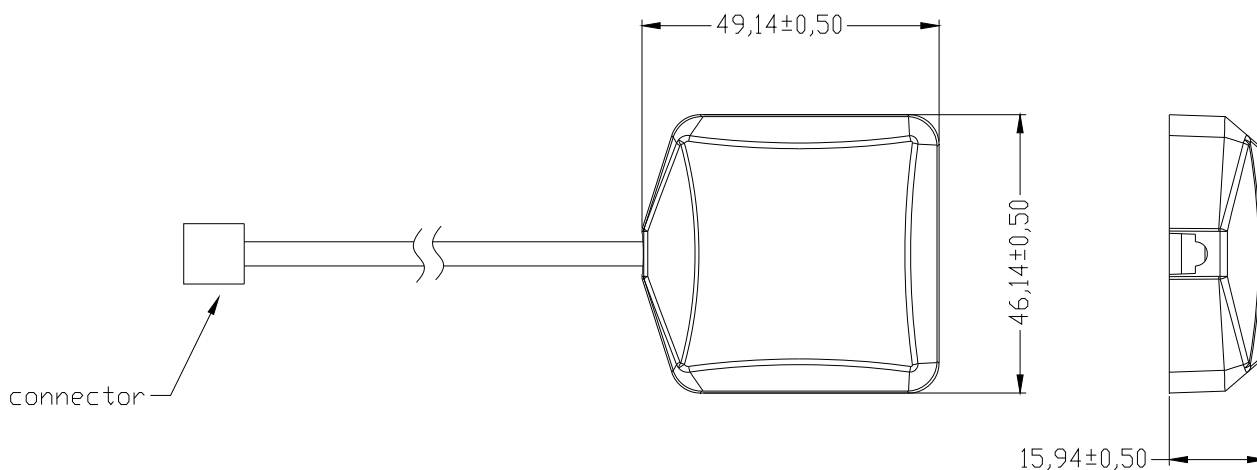
UNLESS OTHER SPECIFIED TOLERANCES ON : X = ±            X.X = ±            X.XX = ANGLES = ±            HOLE DIA = ±		 <b>INPAQ TECHNOLOGY CO., LTD.</b>
SCALE :	UNIT : mm	
DRAWN By 趙彥年	CHECKED BY: 楊奇峯	THIS DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY OF INPAQ TECHNOLOGY CO.,LTD.AND SHALL NOT BE REPRODUCED OR USED AS THE BASIS FOR THE MANUFACTURE OR SALE OF APPARATUS OR DEVICES WITHOUT PERMISSION
DESIGNED BY: 莊意堂	APPROVED BY : 曾源標	
TITLE : MDL GPS/GLONASS 3V0 SMA PLUG RG-174 10M 6 GPSGLONASS02G-S3-03-A		DOCUMENT NO. <b>ENS000038230</b>
		SPEC REV. <b>A0</b>

Characteristics	Specification
Frequency Domain	1575MHz~1615MHz
Center Frequency	1593 MHz
Gain	28±3 dB (at 3.0±0.1 V)
Noise Figure	2.0 dB max
Filter Outband attenuation (at 5.0±0.1 V)	34dB typ. fo±50MHz 49dB typ. fo±100MHz (fo=1593MHz)
Output V.S.W.R	2.0 max
Operation Voltage	3.0±0.3 V
Current	8±3 mA (at 3.0±0.1 V)

### 5-3 Overall Specification <Through Antenna, LNA, without cable loss>

Characteristics	Specification
Center Frequency	1593 MHz
Average Gain	30 dBic typ(for ground 70x70mm at 3.0±0.1 V)
Output Impedance	50 ohm
Output VSWR	2.0 typ
Operation Voltage	3.0±0.3 V
Current	8±3 mA (at 3.0±0.1 V)

## 6. Antenna Dimensions:



UNLESS OTHER SPECIFIED TOLERANCES ON :

X = ±      X.X = ±      X.XX =  
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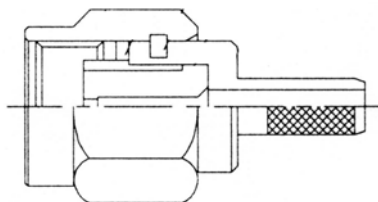
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標 示	內 容	規 格
A	線長+CONNECTOR	10000 ± 200mm, SMA PLUG RG174 Black
B	沾錫	6.0 ± 0.5mm
C	絕緣體(作業時需能承受 350 度 C 的溫度而不會短路約略 3 秒鐘)	1.5 + 0.5mm - 0 mm
D	心線沾錫 (七股絞線)	1.5 ± 0.5mm

Connector appearance : SMA PLUG



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