

MDL MIX GPS/GPRS SMA/SMA RG-174 5M**GPS01S-S4-00-A****1. Application:**

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

2. Appearance:

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

Dimensions	85*56*19.5mm	Radome	#S
Weight	128.6g	Connector	GPS/GPRS SMA/SMA
Color	Black	Cable	RG-174 5M
Label	No	Twin Adhesive	Yes

3. Operating Condition:

Temperature : - 40 to + 85°C

Humidity : 10 to 95%RH

4. Storage Condition:

Temperature : - 40 to + 85°C

Humidity : 10 to 95%RH

UNLESS OTHER SPECIFIED TOLERANCES ON :
 X=N/A X.X=N/A X.XX =N/A
 ANGLES=N/A HOLEDIA=N/A



INPAQ TECHNOLOGY CO., LTD.

SCALE : N/A

UNIT : mm

DRAWN BY : 曾玟瑛

CHECKED BY: 楊奇峰

DESIGNED BY: 陳智威

APPROVED BY : 曾源標

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5. Electrical Specification:

All value are defined at 25±15°C , 60±20%RH , power handing 1 u watt,
Pressure 960±100HPA unless otherwise noted.

5.1 GPS Active Antenna Electrical Specification:

Parameter	Electrical Specifications
Frequency Range	1575.42MHz ± 2.5MHz
Patch Antenna Polarization	RHCP
VSWR(50ohm)	< 2.0
Elevation Patch Antenna Axial Ratio at θ= 0 degree (dBic)	3 typ.
Elevation maximum patch Antenna Gain or directive (dBic)	3.0 dBic typ.
Elevation Patten	Hemispherical
LNA DC Voltage	3~5V
LNA DC Current	10 ± 4 mA
LNA Amplifier Gain(dB)	≥ 25 dBm
Noise figure including filter and LNA @ambient temperature	2.5 dB Typical
LNA input near 1575 MHz P1dB	< -23 dBm
Isolation between the GPS patch including first stage filter and the GPRS antenna @1710~1990 MHz and @915~824 MHz	-45 dB Min.
Test Condition	The patch Antenna gain is the gain at the Feed point of the antenna ; do not include The cable and the connector.

5.2 Cellular/GPRS Antenna Electrical Specifications:

Parameter	Electrical Specifications
Frequency Range	824MHz ~ 896 MHz (GSM850) 880MHz ~ 960 MHz (GSM900) 1710 ~ 1880 MHz (DCS) 1850 ~ 1990 MHz (PCS)
Polarization	Linear
VSWR(50ohm)	≤ 3
Peak Gain	>2dBi
Azimuth Pattern	Omni-directional
Power Handling(W)	>10
Testing condition	The antenna gain is defined at the Antenna feed point ,not including the cable loss

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ANGLES = N/A HOLEDIA = N/A



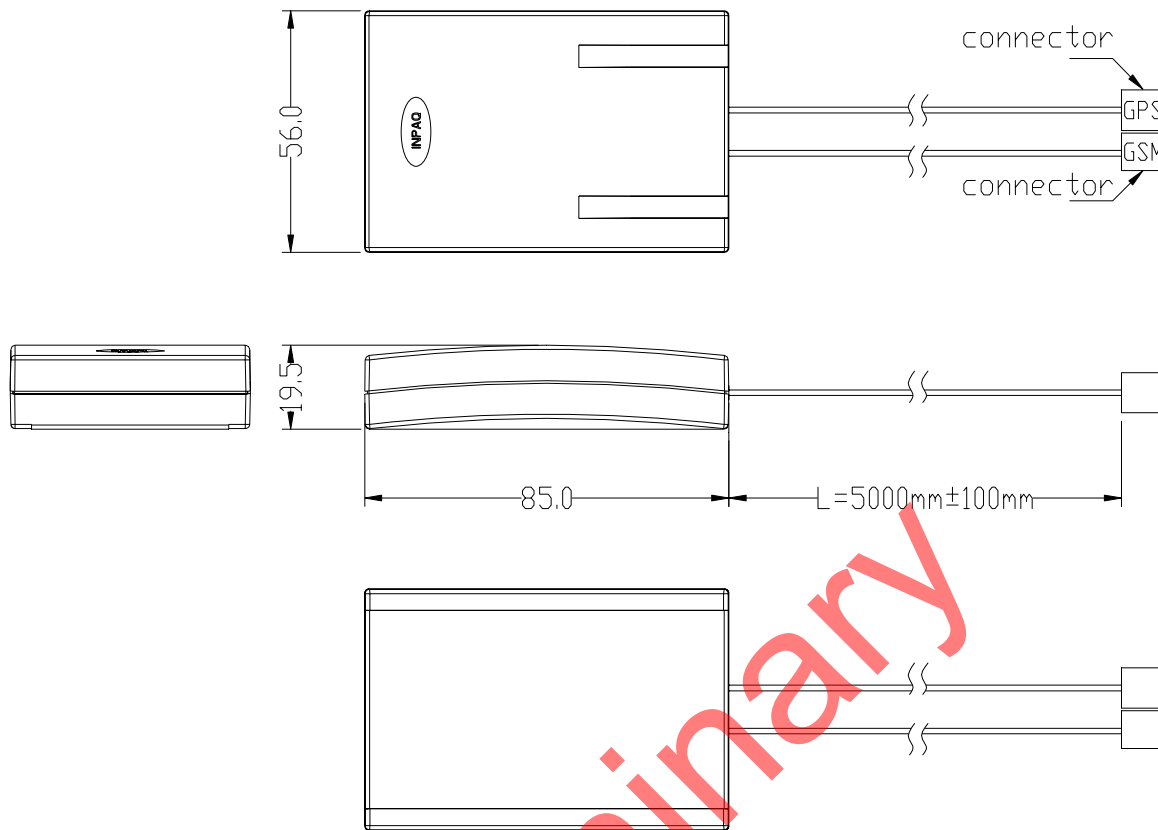
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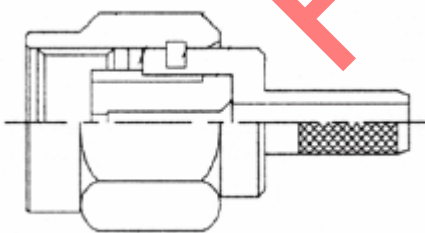
6. Antenna Dimension:



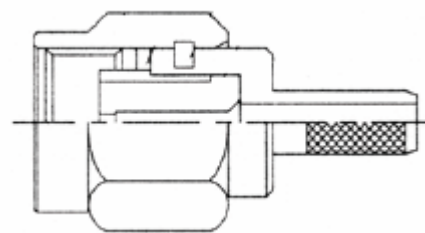
Unit:mm

Connector appearance: SMA/SMA Plug

SMA Plug



SMA Plug



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