# MDL GPS/N-3V0 I-PEX MHF (HRS UFL) $\Phi$ 1.13 55mm GPSH237N-N3-37-A

# 1. Application:

This application shall apply for antenna unit which shall be used with an engine for an automobile.(for impedance  $50\,\Omega$ )

## 2. Appearance:

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

Dimensions 18.4\*18.4\*6.6 mm : Radome #N

Weight 7.55  $\pm$ 1 g (typ) ; Connector I-PEX MHF(HRS UFL) Color gray ; Cable RF  $\oplus$ 1.13 55mm

PCB lead free

# 3. Operating Condition:

Temperature -40 to +90° C

## 4. Storage Condition:

Temperature -40 to +90 $^{\circ}$  C Humidity 65 $\pm$ 20 % RH

# 5. Electrical Specification:

- $\star$  All value are defined at 25 $\pm$ 15 $^{\circ}$  C, 65 $\pm$ 20 % RH, power handling 1 u watt, air pressure 960  $\pm$ 100 HPA unless otherwise noted.
- \* Patch characteristics are measured with test ground plane in an anechoic chamber.

#### ■ Patch Specification.

Characteristics	Specification
Center Frequency	1575.42±2 MHz ( when covered with a radome on LNA ground plane. )
Bandwidth (10dB return loss)	10 MHz min
Gain at Zenith	2.0 dBic typ
Polarization	R.H.C.P
Axial Ratio	3.0dB typ(for PDA mechanical & ground 18.4x18.4mm)

#### ■ Filter/LNA Specification.

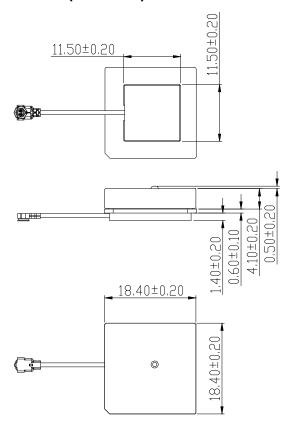
<u> </u>	
Characteristics	Specification
Gain	21±3dB (DC=3.0V)
Noise Figure	1.5 dB typ (DC=3.0V)
Output V.S.W.R	2.0 max (DC=3.0V)
Current (DC= 3.0±0.1V)	4.5±1.5 mA

UNLESS OTHER SPECIFI X = ± X.X = ± ANGLES = ±		<b>G</b>	INPAQ TECHNOLOGY CO	)., LTD.
	UNIT: mm		AND SPECIFICATIONS ARE THE PROPERT	
DRAWN BY: 林娟塚ূ	CHECKED BY:李赞杨		THE MANUFACTURE OR SALE OF APP.	
DESIGNED BY:李赞杨	APPROVED BY:李志强 🦠	DEVICES WITHOU	IT PERMISSION	
TITLE: MDL GPS/N-3V0 I-PEX MHF (HRS UFL)		DOCUMENT	ENS000079610	SPEC REV.
Φ1.13 55mm GPSH237N-N3-37-A		NO.	LN3000079010	A0

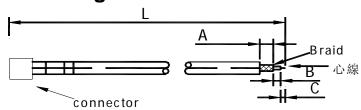
## Overall Specification.

Characteristics	Specification
Center Frequency	1575.42±2MHz ( when covered with a radome on LNA ground plane. )
Gain at Zenith	23dBic typ(for ground 18.4x18.4mm)
Output Impedance	50ohm
Output VSWR	2.0 typ
Operation Voltage	3.0 ±0.1V

# 6. Antenna Dimensions: (unit: mm)



# 7. Cable Length:



 $\textbf{Connector}: \text{I-PEX MHF (HRS UFL)} \; ; \quad \textbf{Cable}: \text{RF Cable } \phi 1.13 \text{(Gray)}$ 

L:  $55\pm 2$ mm A:  $1.5\pm 0.5$ mm B:  $1\pm 0.5$ mm C:  $1\pm 0.5$ mm

UNLESS OTHER SPECIF	TED TOLERANCES ON:				
$X = \pm$ $X.X = \pm$	X.XX =	G	INPAQ TECHNOLOGY CO	ודה	
$ANGLES = \pm HOLE DIA = \pm$		INFAQ TECHNOLOGY CO., LI			
SCALE: N/A	UNIT: mm	THIS DRAWINGS	AND SPECIFICATIONS ARE THE PROPERT	Y OF INPAQ	
DRAWN BY: 林娟 娇俏	CHECKED BY:李赞杨春春		LLTD.AND SHALL NOT BE REPRODUCED ( THE MANUFACTURE OR SALE OF APP.		
DESIGNED BY:李赞杨春蕉	APPROVED BY:李志强 🗽	DEVICES WITHOUT PERMISSION			
TITLE: MDL GPS/N-3V0 I	-PEX MHF (HRS UFL)	DOCUMENT	ENS000079610	SPEC REV.	
Φ1.13 55mm GPSH237N-N3-37-A		NO	EN2000013010	Α0	