

6 5 4 3 2 1

D

C

B

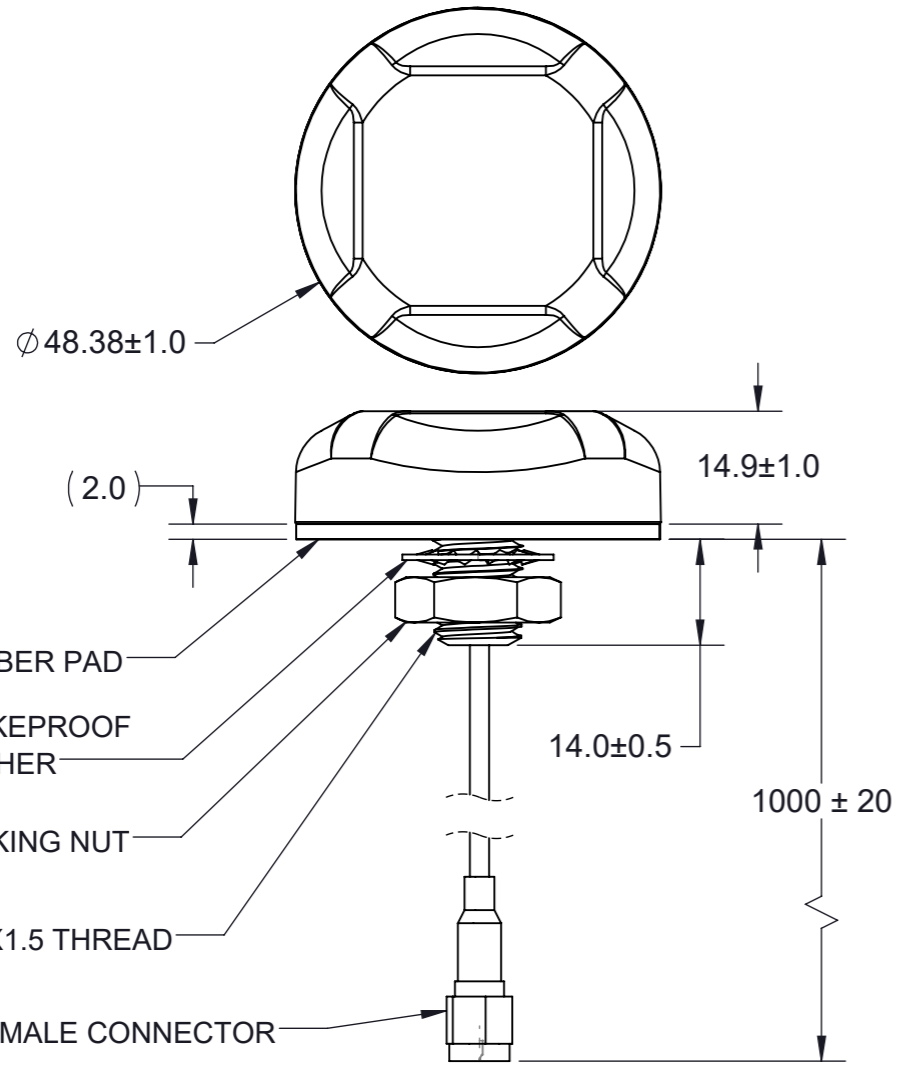
A

D

C

B

A



PARAMETER		SPECIFICATION
Antenna Model		GNS1559MPF-100SMAM
Number of Ports		1
Frequency Range, MHz	Beidou	1561.098±2.046
	GPS	1575.42±1.023
	GLONASS	1602±5
VSWR		≤2.5
Impedance, Ohm		50
Current Consumption, mA		8.5±3 (at 3.0V)
Input Max Power, dBm		-10
Antenna Dimension (Dia x Ht), mm		48.38 X 14.9
Weight, kg		0.084
Cable Length/Connector, cm		100/SMA, Male
Cable Type		RG174, Black
Mounting		P-Mount
Antenan Color		Black
Radome Material		PC, UL94-V0
Ingression Protection		IP-67
Operating Temperature, °C		-30 to +70
Storage Temperature, °C		-40 to + 85
ESD, kv		+/- 2 (contact discharge) +/- 4 (air discharge)
RoHS Compliance		Yes

F08

Notes:
 - Antenna is measured on 1ft metal ground plane & 1m RG174 cable.
 - Antenna specification is subjected to change according to the ground plane size & cable length.


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REVISIONS					
REV.	ECN#	ZONE	DESCRIPTION	CHANGED BY/DATE	APPROVED BY/DATE
F03			UPDATED INPUT MAX POWER; REMOVED DC CURRENT SPEC.	YS TAN 12FEB20	WT NG 12FEB20
F04			UPDATED SPECIFICATION	YS TAN 11MAR20	WT NG 11MAR20
F05			UPDATED OUT OF BAND REJECTION VALUE	YS TAN 07APR20	WT NG 07APR20
F06			CORRECTION ON CABLE TYPE	YS TAN 09APR20	WT NG 09APR20
F07			REMOVED ANTENNA MODEL, VSWR AND BANDWIDTH FROM PASSIVE ANTENNA SPEC. TABLE.	YS TAN 10APR20	WT NG 10APR20
F08	ECO-20-00104		REVISED ANTENNA P/N FROM GPS1559MPF-100SMAM TO GNS1559MPF-100SMAM; UPDATED SPECIFICATION TABLE	YS TAN 15MAY20	WT NG 15MAY20
F09	ECO-20-00707		UPDATED GNSS ANTENNA SPECIFICATION TABLE	YS TAN 26NOV20	WT NG 26NOV20

GNSS ANTENNA SPECIFICATION

Electrical Characteristics			
Passive Antenna			
1	Frequency Range, MHz	Beidou	1561.098±2.046
		GPS	1575.42±1.023
		GLONASS	1602±5
2	Absolute Gain* (dBi)	Beidou	4.6
		GPS	2.6
		GLONASS	4.4
3	Polarization	RHCP	
*Based on 50 mm cable length on 1ft metal ground plane.			
LNA (without patch element)			
1	DC Voltage, V	2.5 ~ 7	
2	Gain, dB	28±3	
3	VSWR	≤2.5	
4	Noise Figure, dB	≤2.5 @ 1575 MHz	
5	Out of Band Rejection, dBc	698-960 MHz	>80
		1428-1511 MHz	>80
		1710-2700 MHz	>80
		4900-5800 MHz	>70
6	P1dB, dBm	-33	

F09

MATERIAL: N/A		THIRD ANGLE PROJECTION		 IAS, PENANG MALAYSIA	
FINISH: N/A		DO NOT SCALE DRAWING			
APPROVALS		DATE		TITLE:	
DRAWN BY	YS TAN	09JAN20		GNS1559MPF-100SMAM	
ELEC. ENG.	EC LEE	09JAN20		MOUNTING & OUTLINE	
MECH. ENG.	YS TAN	09JAN20		SIZE	
MFG./OPS.	GL YEAP	09JAN20		A3	
				DWG. NO.	
				GNS1559MPF-100SMAMMO	
				REV	
				F09	
				SCALE: 1:1	
				PREVIOUS#	
				SHEET 1 OF 1	

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