

# GRK-1A

## GPS Signal Repeater

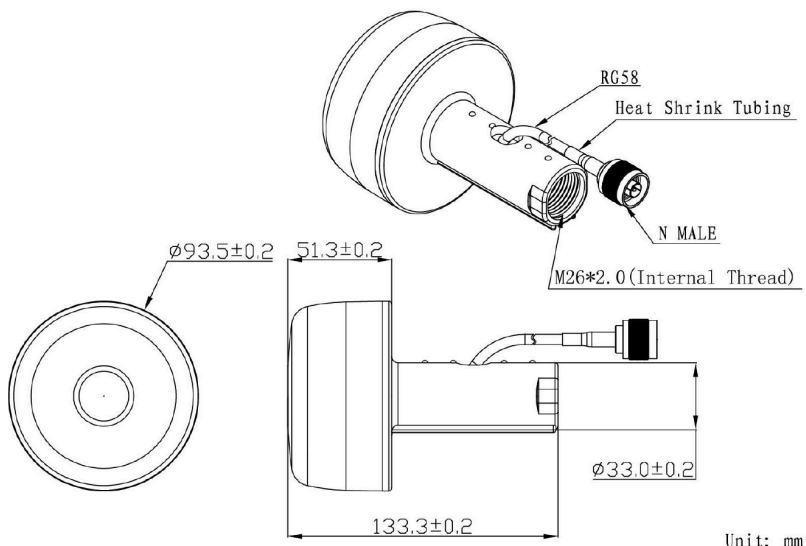


Receiver Antenna



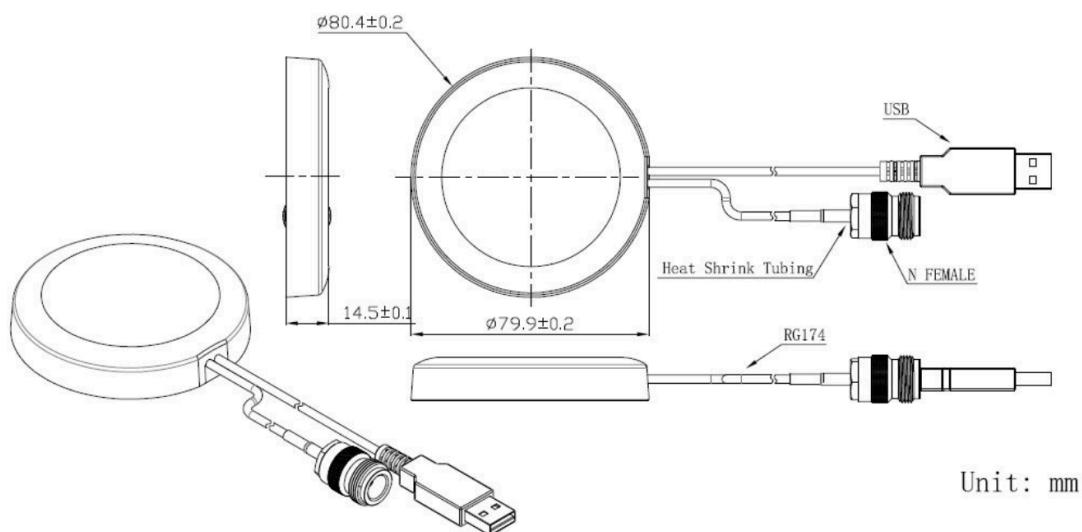
Transmitter Antenna

### Dimensions



Unit: mm

## Dimensions



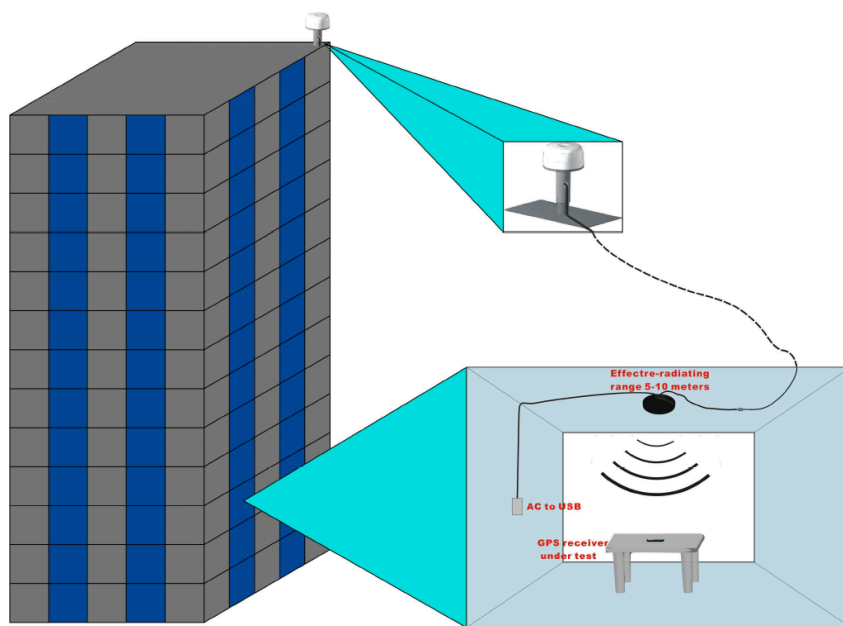
## Specifications

Item	Specifications	
Receiver Antenna	Center Frequency	$1575.42 \pm 1\text{MHz}$
	Band Width	$CF \pm 10\text{MHz}$
	Polarization	RHCP
	Impedance	$50 \Omega$
	Axial Ratio	3dB (max)
	Antenna Gain	5dBic (Zenith)
	Antenna V.S.W.R	$< 1.2$
	LNA Gain	$38 \pm 2\text{dB}$
	LNA Noise Figure	$< 1.0$
	LNA V.S.W.R	$< 2.0$
	Filter Insertion Loss	$< 3\text{dB}$
	Ex-band Attenuation	$12\text{dB}@CF+50\text{MHz}/16\text{dB}@CF-50\text{MHz}$

## Specifications

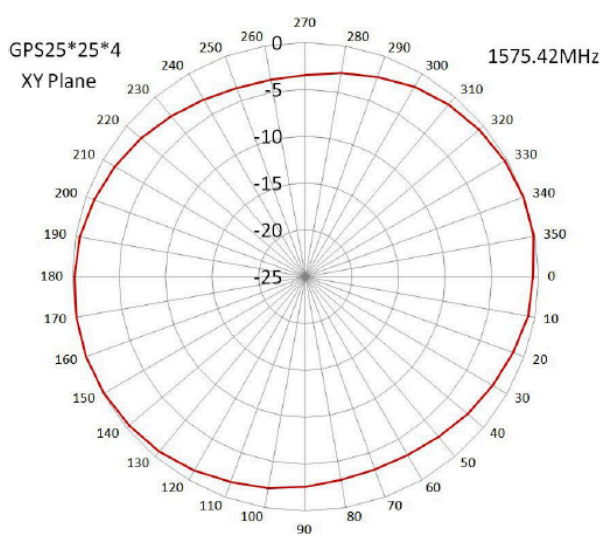
Transmitter Antenna	Center Frequency	1575.42±1MHz
	Band Width	CF±5MHz
	Polarization	RHCP
	Impedance	50 Ω
	Axial Ratio	3dB (max)
	Antenna Gain	4.5dBic (Zenith)
	Antenna V.S.W.R	<1.2
	LNA Gain	40±2dB
	LNA Noise Figure	<1.8
	LNA V.S.W.R	<2.0
	Supply Voltage	5v DC (USB)
	Current Consumption	<100mA
	Signal Coverage	20meters 150degrees
Mechanical	Cable	SYV-50-5/RG58/RG174
	Connector	N(couple) or others
	Radome Material	ABS
	Mounting Method	Screw/Magnet
Environmental	Operating Temperature	-40°C~+85°C
	Relative Humidity	Up to 95%
	Ingress Protection	IP67 (Receiver Antenna)
	Vibration	10 to 55Hz with 1.5mm amplitude 2hours

## Installation Demonstration

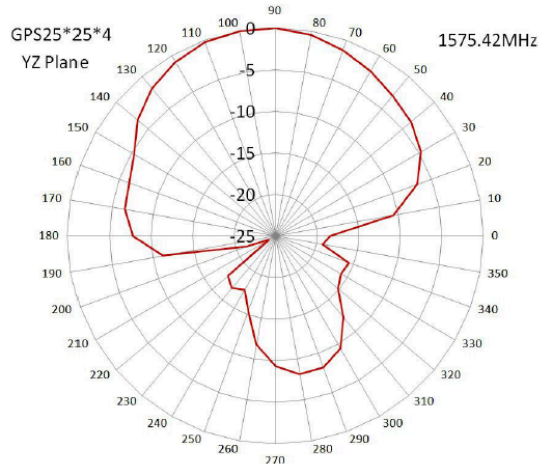
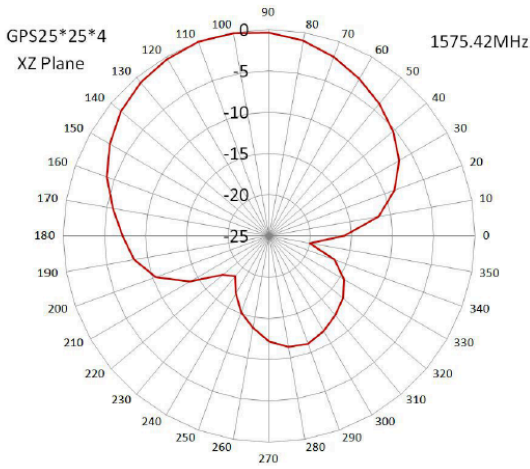


## Radiation Pattern

### Transmitter Antenna



## Radiation Pattern



## Receiver Antenna

