

Antenna



Donor Ant



GNSS Ant



Service Ant



Service
Omni Ant



✓ MECHANICAL & ENVIRONMENTAL

PARAMETER	SPECIFICATIONS
Dimensions (W x D x H)	115.0 x 40.0 x 127.7 (mm)
Weight	387g (including 5m cable)
Temperature	- 40 °C ~ +125 °C

◆ SYSTEM SPECIFICATION

✓ Donor Antenna

Item	Specification		
Standard Specifications	Donor Antenna	classification	Patch Antenna
		Color	White
	Basic Cables	classification	3D-FV
		length	5m
		plug	SMA-P
		Color	White
Frequency range	900M~960MHz 1,750M~1,860MHz 1,960M~2,170MHz		
Polarization	Vertical		
Beam width	H 45~90°		
	V 45~90°		
Gain	< 7dBi (without cable)		
	< 5dBi (with cable)		
F/B H	> 10dB		
VSWR	< 2.0		
impedance	50±2 Ω		
Operating Temperature	-30 °C ~ + 70 °C		
Maximum Attenuation	900MHz – 0.33dB/m		
	1500MHz – 0.43dB/m		
	20000MHz – 0.53dB/m		

✓ Extension Cable

Items	Specification
classification	3D-FV
Outer diameter	5.2 ±0.5 [mm]
length	3m
plug	SMA-P / SMA-J
Color	White
Operating Frequency	5.8 GHz max.
Capacitance	80.3 pF/m
Impedance	50±2 Ω
Operating Temperature	-25°C ~ +85°C
Shielding effect	90dB
Velocity	83%



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PARAMETER	SPECIFICATIONS
Dimensions	Ø110.3 x 105 (mm)
Weight	320g
Temperature	- 40 °C ~ +80 °C

◆ SYSTEM SPECIFICATION – High Gain

✓ Electrical Characteristics

Item	Specification	
Frequency range	L1, E1: 1575.42MHz±1.023MHz B1: 1561.098MHz±2.046MHz GLONASS: 1602.5625MHz±1.15MHz	
VSWR	< 2.0	
impedance	50±2 Ω	
Gain	5.5dBic Based on 7x7cm ground plane	
Polarization	RHCP	
Built-in LNA	Power	3 ~ 5V
	Gain	40±3dB
	Output VSWR	≤2.0
	Noise Figure	≤2.5dB
	DC전류	≤20mA
Gain	5.5dBic Based on 7x7cm ground plane	
Total Gain	> 40dBi (Antenna+LNA)	
Operating Temperature	-30 °C ~ + 70 °C	

✓ Mechanical characteristics

Items	Specification
Antenna	Dielectric Ceramics
Shielding	Tinplate
Shell	ABS
RF Connector	N type joint
Mounting bracket	Steel
Cable - Connector Tensile	≥50N (Josephalbert force of cable and connectors)
Cable - Antenna Unit Tensile	≥50N (Cable and antenna Josephalbert force)
humidity	100%RH
vibration	Sine sweep 1g (0-p)
	10 ~ 55 ~ 10Hz each axis
Dust/water resistance rating	IP66
Flame retardant	UL94V0
Weathering Measures	UL746
ESD Protection	Meet the IEC61000-4-5 Standard, can withstand the impact of 1.2/50, 4 KV s.



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PARAMETER	SPECIFICATIONS
Dimensions (W×D×H)	180x180x72 (mm)
Weight	800g
Temperature	- 5 °C ~ +40 °C

◆ SYSTEM SPECIFICATION – Patch Type

Item		Specification
Antenna Type		Patch (directional)
Operating Frequency	800MHz band	815-890MHz
	900MHz band	900-960MHz
	1.7GHz band	1710-1880MHz
	2.1GHz band	1920-2170MHz
	2.3GHz band	2330-2370MHz
	2.5GHz band	2496-2690MHz
	3.4GHz band, 3.5GHz band	3400-3600MHz
Number of TX/RX		2T2R
F/B Ȥ		10dB
VSWR		1.8:1 or less
Polarization		±45°
Maximum input power		50W
Impedance		50Ȣ
Input/output connector shape		2 x N-Female (Pig Tail)
Size (W×D×H)		180x180x72 mm
Weight (antenna)		0.8kg
Environment conditions	Operating Temperature	-5~+40ȢC
	Operating humidity	~95%RH
	Dustproof/W aterproof	IP31

Items		Specification
Antenna Gain [dBi]	800MHz band	≤10dBi
	900MHz band	≤10dBi
	1.7GHz band	≤10dBi
	2.1GHz band	≤10dBi
	2.3GHz band	≤10dBi
	2.5GHz band	≤10dBi
	3.4GHz band, 3.5GHz band	≤10dBi
Horizontal half-width angle	800MHz band	100~130°
	900MHz band	100~130°
	1.7GHz band	40~80°
	2.1GHz band	40~80°
	2.3GHz band	40~80°
	2.5GHz band	40~80°
	3.4GHz band, 3.5GHz band	40~80°
Vertical half-width angle	800MHz band	90~130°
	900MHz band	90~130°
	1.7GHz band	40~80°
	2.1GHz band	40~80°
	2.3GHz band	40~80°
	2.5GHz band	40~80°
	3.4GHz band, 3.5GHz band	40~80°



✓ MECHANICAL & ENVIRONMENTAL

PARAMETER	SPECIFICATIONS
Dimensions (ø x H)	ø180x18 (mm)
Weight	300g
Temperature	- 5 °C ~ +40 °C

◆ SYSTEM SPECIFICATION – Omni Type

Item		Specification
Antenna Type		Omni (omnidirectional)
Operating Frequency	1.7GHz band	1710-1880MHz
	2.1GHz band	1920-2170MHz
	2.3GHz band	2330-2370MHz
	2.5GHz band	2496-2690MHz
	3.4GHz band	3400-3600MHz
	3.5GHz band	3400-3600MHz
	3.9GHz band	3600-4100MHz
	4.5GHz band, 4.9GHz band	4500-5000MHz
Number of TX/RX		2T2R
Port-to-port isolation		-15dB
VSWR		1.7:1 or less
Polarization		VH
Maximum input power		1W
Impedance		50Ω
Input/output connector shape		2 x N-Female (Pig Tail)
Size (ø×H)		ø180x18 mm
Weight (antenna)		0.3kg
Environment conditions	Operating Temperature	-5~+40°C
	Operating humidity	~95%RH
	Dustproof/Waterproof	IP31

Items		Specification
Antenna Gain [dBi]	1.7GHz band	≤8dBi
	2.1GHz band	≤8dBi
	2.3GHz band	≤8dBi
	2.5GHz band	≤8dBi
	3.4GHz band	≤8dBi
	3.5GHz band	≤8dBi
	3.9GHz band	≤8dBi
	4.5GHz band 4.9GHz band	≤8dBi
Horizontal half-width angle		Omni
Vertical half-width angle	1.7GHz band	>20°
	2.1GHz band	>20°
	2.3GHz band	>20°
	2.5GHz band	>20°
	3.4GHz band 3.5GHz band	>20°
	3.9GHz band	>20°
	4.5GHz band 4.9GHz band	>20°