

Antenna



Donor Ant



GNSS Ant



Service Ant



Service
Omni Ant



◆ SYSTEM SPECIFICATION

✓ 도너 안테나



✓ 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

✓ 연장 케이블

Item	Specification		
기본사양	도너 안테나	분류	패치 안테나
		색상	White
	기본 케이블	분류	3D-FV
		길이	5m
		플러그	SMA-P
색상	White		
주파수 범위	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 비	> 10dB		
VSWR	< 2.0		
임피던스	50±2 Ω		
동작 온도	-30 °C ~ + 70 °C		
Maximum Attenuation	900MHz – 0.33dB/m		
	1500MHz – 0.43dB/m		
	20000MHz – 0.53dB/m		

Items	Specification
분류	3D-FV
외경	5.2 ±0.5 [mm]
길이	3m
플러그	SMA-P / SMA-J
색상	White
동작주파수	5.8 GHz max.
Capacitance	80.3 pF/m
Impedance	50±2 Ω
동작 온도	-25°C ~ +85°C
Shielding effect	90dB
Velocity	83%



✓ MECHANICAL & ENVIRONMENTAL

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

◆ SYSTEM SPECIFICATION – High Gain

✓ 전기적 특성

Item	Specification	
주파수 범위	L1, E1: 1575.42MHz±1.023MHz B1: 1561.098MHz±2.046MHz GLONASS: 1602.5625MHz±1.15MHz	
VSWR	< 2.0	
임피던스	50±2 Ω	
Gain	5.5dBic Based on 7x7cm ground plane	
Polarization	RHCP	
내장 LNA	Power	3 ~ 5V
	Gain	40±3dB
	Output VSWR	≤2.0
	Noise Figure	≤2.5dB
	DC 전류	≤20mA
Gain	5.5dBic Based on 7x7cm ground plane	
Total Gain	> 40dBi (Antenna+LNA)	
동작 온도	-30 °C ~ + 70 °C	

✓ 기구적 특성

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)
습도	100%RH
진동	Sine sweep 1g (0-p)
	10 ~ 55 ~ 10Hz each axis
방진/방수 등급	IP66
난연성	UL94V0
풍화대책	UL746
ESD Protection	Meet the IEC61000-4-5 Standard, can withstand the impact of 1.2/50, 4KV s.



◆ SYSTEM SPECIFICATION – Patch Type



✓ MECHANICAL & ENVIRONMENTAL

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

Item	Specification	
Antenna Type	Patch (directional)	
동작 주파수	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 비	10dB	
VSWR	1.8:1 or less	
Polarization	±45°	
Maximum input power	50W	
Impedance	50Ω	
Input/output connector shape	2 x N-Female (Pig Tail)	
Size (W×D×H)	180x180x72 mm	
Weight (antenna)	0.8kg	
Environment conditions	동작온도	-5~+40°C
	동작습도	~95%RH
	방진/방수 등급	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°



◆ SYSTEM SPECIFICATION – Omni Type

✓ MECHANICAL & ENVIRONMENTAL

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

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	
	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 (φ×H)	ø180x18 mm	
Weight (antenna)	0.3kg	
Environment conditions	동작온도	-5~+40°C
	동작습도	~95%RH
	방진/방수 등급	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	
	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	>20°
	3.5GHz band	
	3.9GHz band	>20°
	4.5GHz band, 4.9GHz band	>20°