

DATASHEET

Type	Mini Combined Antenna
Frequencies	GPS L1(1575.4 MHz) Tetra(380 – 500 MHz)
Mounting	Magnetic mount / Body mount
Part No.	2J7507M/B
Revision	00

Application

Vehicle
Motorhome
Marine
Containers

Features

RoHS Compliant





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1. SPECIFICATIONS

1.1. RF Specifications

1.1.1. GNSS (cable 1)

		2J7507M/B		
Frequency	GPS L1 (1575.42 MHz)			
VSWR	<1.5:1			
Impedance	50 Ohms			
Polarization	RHCP			
	Min.	Typ.	Max.	
Voltage	2.7 V	3.3 V	5.5 V	
Current	15 mA	20 mA	25 mA	
LNA gain *	25 dB	26 dB	27 dB	

(*)Tested with 30 cm cable length

1.1.2. Tetra (cable 2)

		2J7507M/B		
Frequency	Tetra (380 – 500 MHz)			
Gain *	2dBi Max			
VSWR	<2:1			
Impedance	50 Ohms			
Polarization	Linear			
Power handling	50 W			

(*)Tested with 30 cm cable length

1.2. Connection Specifications

1.2.1. Default (recommended)

Cable 1:
Connector type: SMA male
Cable: RG174
Cable length: 2.5 m

Cable 2:
Connector type: SMA male
Cable: RG174
Cable length: 2.5 m

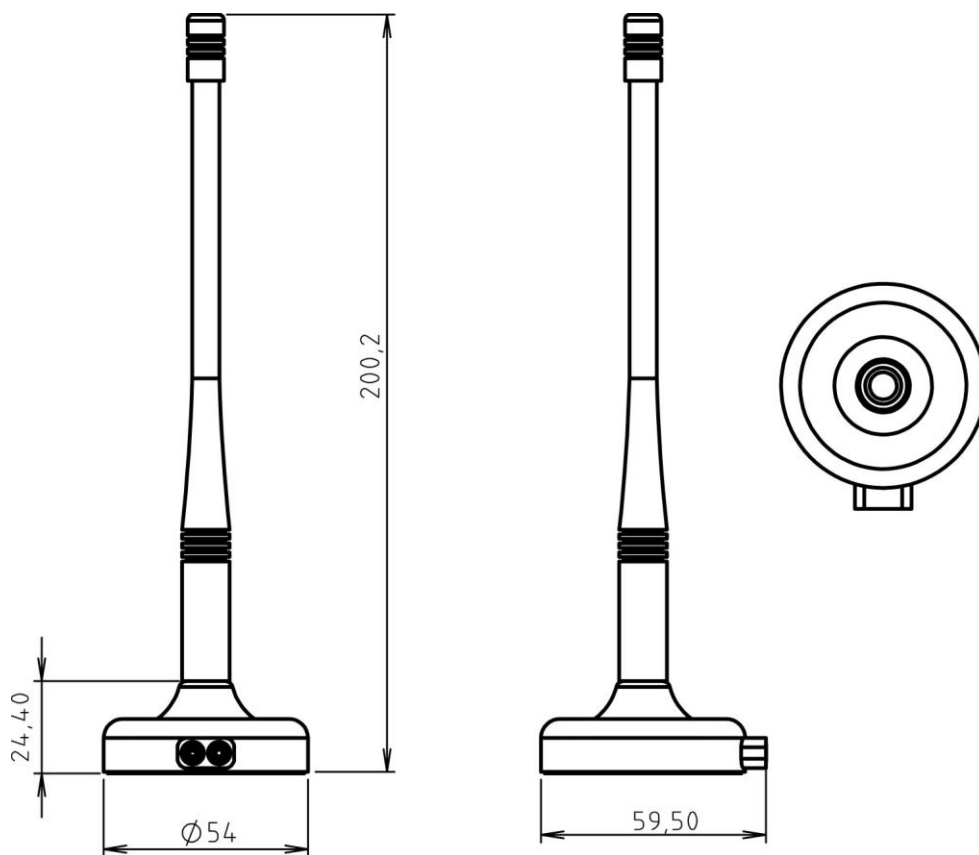
1.2.2. Optional

Suitable cables: RG174, RG316, RG178
Cable length: min. 30 cm
Suitable connectors: All connectors suitable for cables above

1.3. Mechanical Specifications and Dimensions

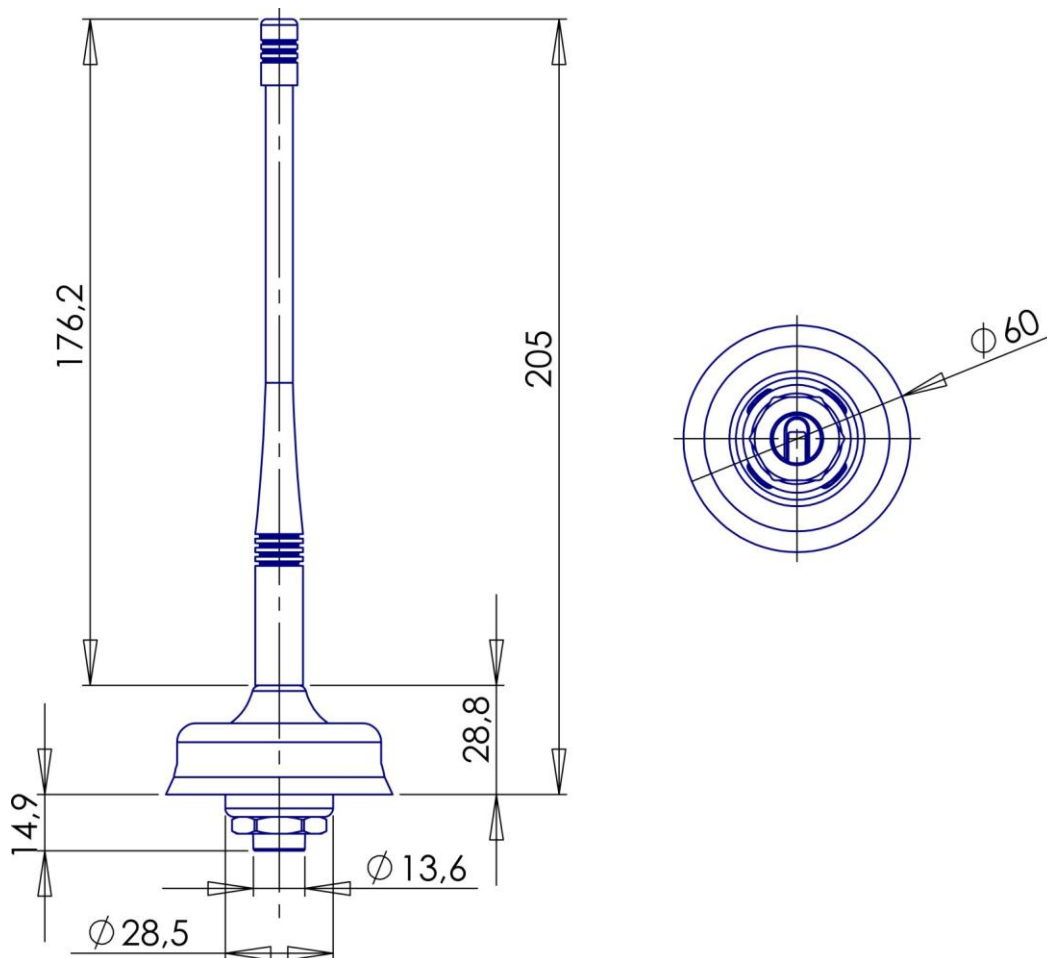
1.3.1. 2J7507M (Magnetic Mount)

Material: Lid: ABS / Base: Zamak
Dimensions: 200.2 mm x 59.5 mm (L x D)
Color: Black (for different colours please ask our sales team)



1.3.2. 2J7507B (Body Mount)

Material: Lid: ABS / Base: Zamak
Dimensions: 220 mm x 60 mm (L x D)
Color: Black (for different colours please ask our sales team)

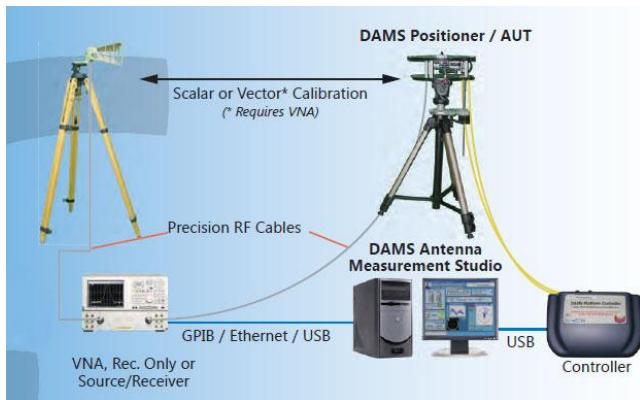


2. MEASUREMENT

2.1. SET for Measurement

Connection:	Antenna connected straight to DAMS platform
Temperature:	25 °C
Frequencies range:	Tetra: 350-550 MHz / GNSS: Center 1575.42 MHz, Span 500 Mhz
Input power:	Tetra: 10 dBm / GNSS: -20 dBm
Cable:	RG174 - 30cm

DAMS positioner with AUT and reference antenna are placed in anechoic chamber

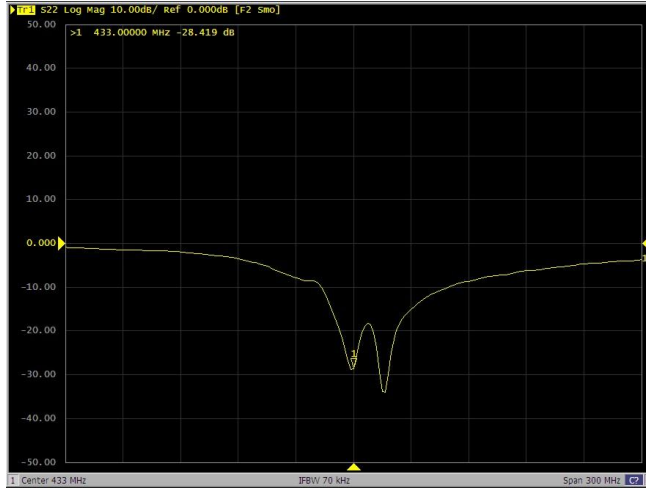




2.2. Electrical Characteristics

Tetra:

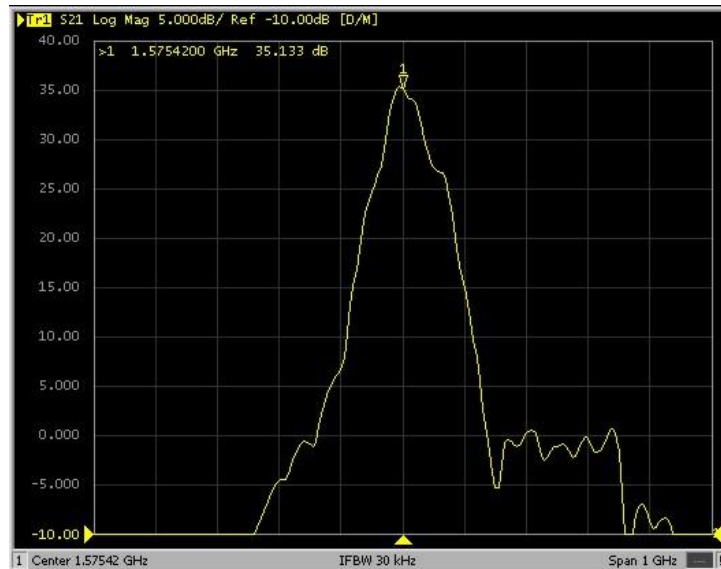
LOG Mag



VSWR

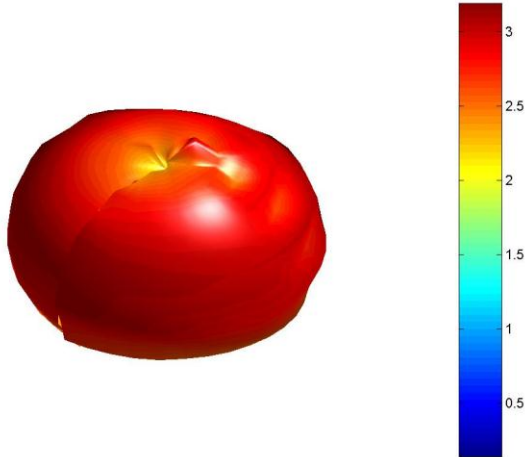


GNSS:

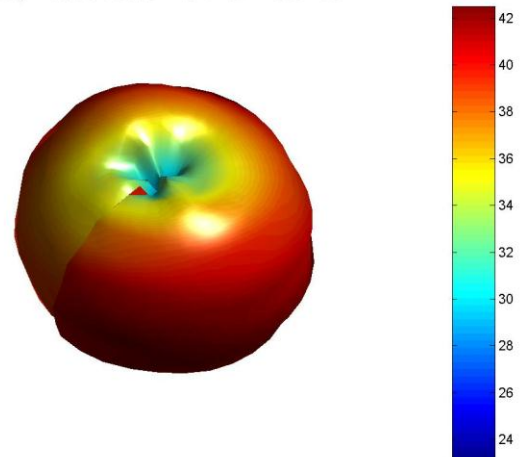


2.3. Radiation Patterns

Freq = 0.4330GHz Az= 45 EL= 45



Freq = 1.5754GHz Az= 45 EL= 45



3. PLACEMENT RECOMMENDATIONS

3.1. Magnetic Mount

- Metallic flat surfaces
- Suggested distance from other antennas min. 40 cm

3.2. Body Mount

- Metallic or other flat surfaces
- Suggested distance from other antennas min. 40 cm

4. IMAGES

4.1.2J757B



4.2.2J757M





5. ORDER INFORMATION

5.1. PN for same cable length

2J	7507	B	-	300	RG174	-	C20	N	-	C20	N		
												Surface finish for connector	
												N	Nickel
												G	Gold
												(TETRA) Connector type	
												C20	SMA male
												C241	Fakra D type water proof (male)
												...	
												Surface finish for connector	
												N	Nickel
												G	Gold
												(GPS) Connector type	
												C20	SMA male
												C241	Fakra D type water proof (male)
												...	
												Cable type	
												RG174	Standard cable for this product
												...	
												Cable length (cm)	
												300	3m cable length
												Mounting type	
												B	Body mount
												M	Magnetic mount
												7507	Product name



5.2.PN for different cable length

2J7507B - 300RG174 - C20N - 300RG174 - C20N

		(TETRA) Surface finish for connector	
N	Nickel		
G	Gold		
		(TETRA) Connector type	
C20	SMA male		
C241	Fakra D type water proof (male)		
...			
		(TETRA) Cacle type	
RG174	Standard cable for this product		
...			
		(TETRA) Cable length (cm)	
300	3m cable length		
		(GPS) Surface finish for connector	
N	Nickel		
G	Gold		
		(GPS) Connector type	
C20	SMA male		
C241	Fakra D type water proof (male)		
...			
		(GPS) Cacle type	
RG174	Standard cable for this product		
...			
		(GPS) Cable length (cm)	
300	3m cable length		
		Mounting type	
B	Body mount		
M	Magnetic mount		
7507	Product name		