

RGA-1582-18

P/N: 75-100178-001

Active GNSS Antenna

The RGA-1582-18 is a rugged outdoor GNSS antenna designed to provide reliable positioning connectivity in demanding industrial and outdoor environments. Supporting GPS, QZSS, GLONASS, Galileo, and BeiDou, it delivers broad GNSS compatibility across the 1559–1606 MHz frequency range.

An integrated low-noise amplifier (LNA) provides 18 dB gain at 3 V for high performance GNSS signal reception. The IP67-rated enclosure is UV- and flame-resistant, providing long-term durability in harsh mobile environmental conditions. The RGA-1582-18 includes a 2 m armored pigtail with a TNC male connector and a heavy-duty wall and pole mounting system for secure, straightforward installation.

RGA-1582-18 Benefits

- Designed for industrial and outdoor applications
- Active GNSS L1 antenna (1559–1606 MHz)
- GPS/QZSS, GLONASS, Galileo, and BeiDou support
- 18 ±3 dB LNA gain at 3 V
17 ±3 dB LNA gain at 1.8 V
- Rugged IP67-rated construction
- UV- and flame-resistant materials
- 2 m armored pigtail with TNC male connector
- Heavy-duty wall and pole mount included
- RoHS & REACH compliant



Technical Data

Nominal Impedance	50 Ω
VSWR	< 2.0
Radome Material	Polycarbonate
Connector	TNC Male
Mounting Type	Screw, pole, wall
Polarization	RHCP
Radiation Pattern	Directional
Cable	ALS302, metal armored, 2 m (6.6 ft)

RF/Electrical Specifications

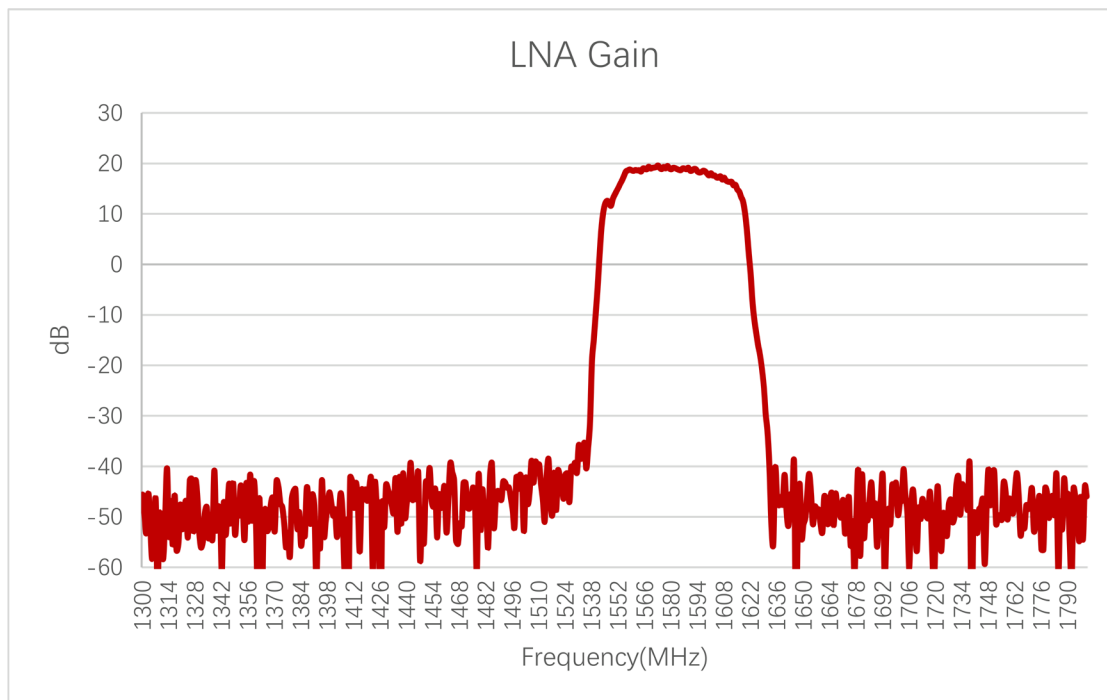
Frequency Range	Nominal Gain	Return Loss	Working Voltage	Working Current
1559 – 1606 MHz	18 ± 3 db	> 9.5 dB	1.8–3.3 V	8.3 ± 1.5 mA

Mechanical Specifications

Operating Temperature	Weight	Dimensions	Housing Flame Rating	Housing UV Resistance
-40 °C to +85 °C -40 °F to +185 °F	810 g 1 lb 12 oz	89 x 86 x 35 mm 3.5 x 3.39 x 1.38 in	UL 94 V-0	UL 746c f1

Frequency Bands (MHz)

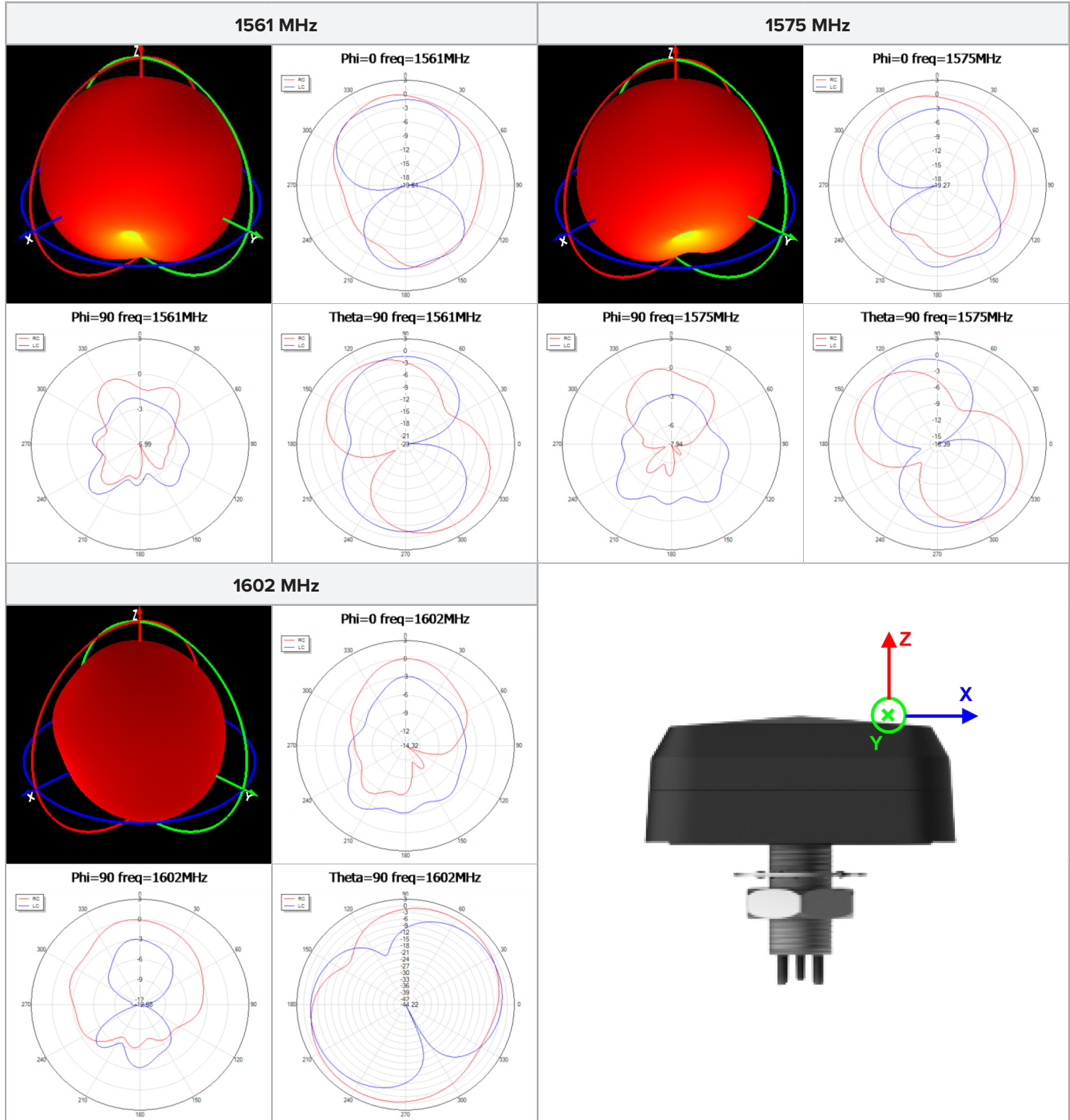
GPS	L1	Center 1575.42 (1565 – 1586)
GLONASS	G1-L10C-L10F	Center 1601 (1595 – 1606)
GALILEO	E1	Center 1575.42 (1563 – 1588)
BDS	B1I	Center 1561.098 (1559 – 1564)
	B1C (BDS-3)	Center 1575.42 (1559 – 1592)
QZSS	L1	Center 1575.42 (1573 – 1578)



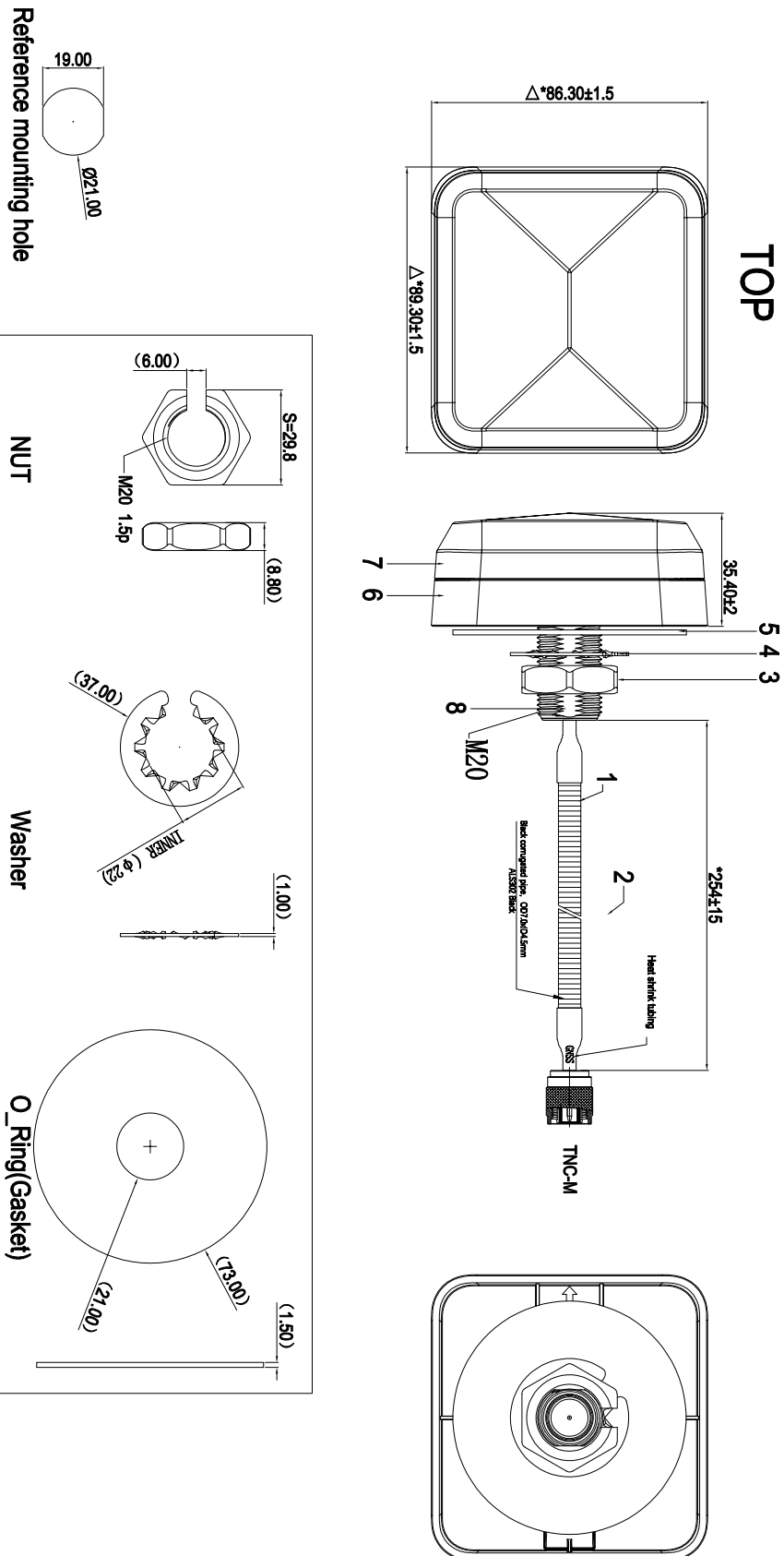
LNA Gain

Frequency (MHz)	1176	1207	1227	1248	1268	1561	1575	1602
LNA Gain (dB)	-	-	-	-	-	18.7	18.8	17.5

3D & 2D Radiation Pattern



Mechanical Drawing



Pole and Wall Mount

Material: Q235A (low-carbon structural steel)

