

# Part No. 1002789M0-AM30L0086 GPS, L1, B1, E1, G1, Iridium Antenna

1518 - 1675 MHz

Supports: Tracking, Agriculture, Industrial Devices, Navigation, Satellite Communications, IoT Systems



KYOCERA AVX antennas deliver on the key needs of device designers for higher functionality and performance in smaller/thinner designs. These innovative antennas provide compelling advantages for GPS, L1, B1, E1, and Iridium band enabled devices.

#### **Real-World Performance and Implementation**

KYOCERA AVX Stamped metal antennas are designed to produce optimal performance and 3D radiation patterns, offering increased coverage range without compromising on footprint dimensions.

# GPS, L1, B1, E1, G1, Iridium Antenna

1518 - 1675 MHz

#### **KEY BENEFITS**

### **Reduced Costs & Time-to-Market**

Standard antennas eliminate design fees, redesign cycle time and minimize risk associated with customer solution. Quicker time to market.

#### **Quicker Time-to-Market**

By optimizing antenna size, performance and emissions, customer and regulatory specifications are more easily met.

# **Environmental Compliance**

Products are the latest RoHS version compliant.

#### **APPLICATIONS**

- **Telematics** systems
- Iridium with **GNSS** Marine & Remote surveillance, Avionics

Systems

- Fleet Management & •
  - Law Enforcement & **Asset Tracking** Public Safety Military and Security

### **Electrical Specifications**

Typical performance on 457.2 x 457.2 mm metal plane

Typical performance on 101.2 X 101.2 min metal plane				
Frequency (MHz)	1518 - 1675			
Peak Gain	6 dBic			
VSWR Match	< 1.2:1			
Polarization	RHCP			
Axial Ratio	< 5 dB at Zenith			
Power Handling	2W CW			
Feed Point Impedance	$50\Omega$ unbalanced			

## **Mechanical Specifications & Ordering Part Number**

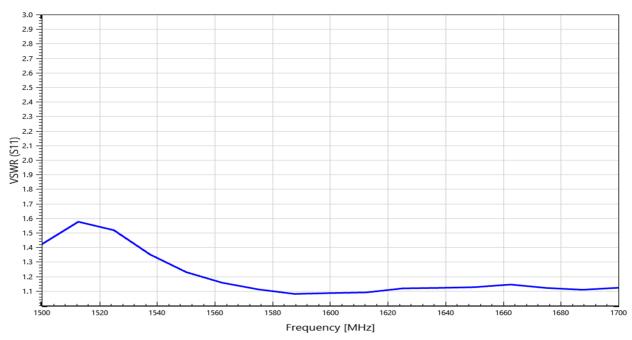
Ordering Part Number	1002789M0-AM30L0086		
Size (mm)	78.0 x 78.0 x 6.6		
Mounting	Adhesive tape		
Weight (grams)	26.47		
Cables and Connectors	1.13 mm Diameter & MMCX Compatible Connector		
Mounting and Cable Length	VHB 3M5925 Adhesive; 86 mm, Black		

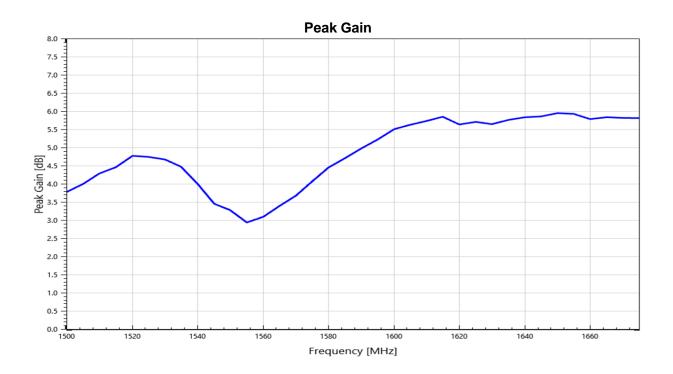


# **VSWR and Peak Gain Plots**

Typical performance on 457.2 x 457.2 mm metal plane



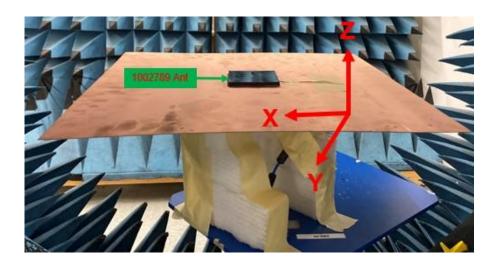




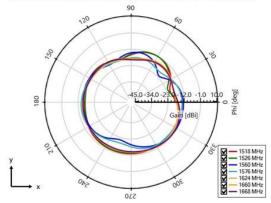


#### **Antenna Radiation Patterns**

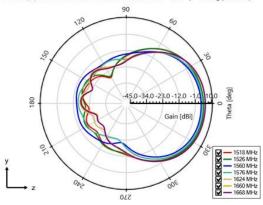
Typical performance on 457.2 x 457.2 mm metal plane Measured @ 1518 - 1675 MHz



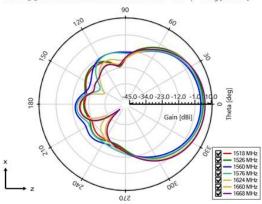




1002789\_F\_with 18 inches x 18 inches GROUND PLANE - Gain -  $\phi$  = 90 deg [Plane YZ]



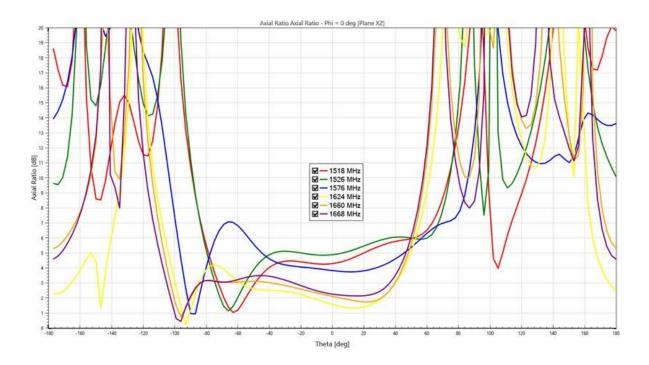


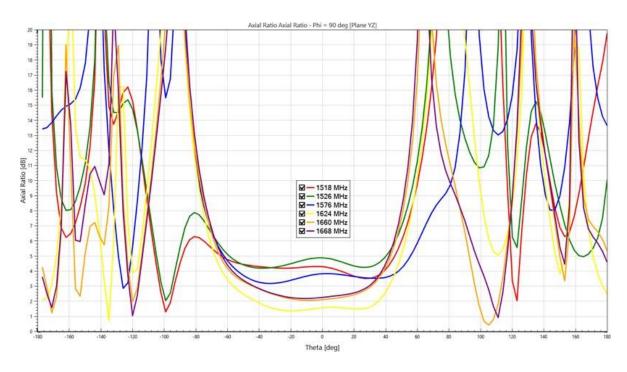




#### **Axial Ratio**

Typical performance on 457.2 x 457.2 mm metal plane Measured @ 1518 - 1675 MHz



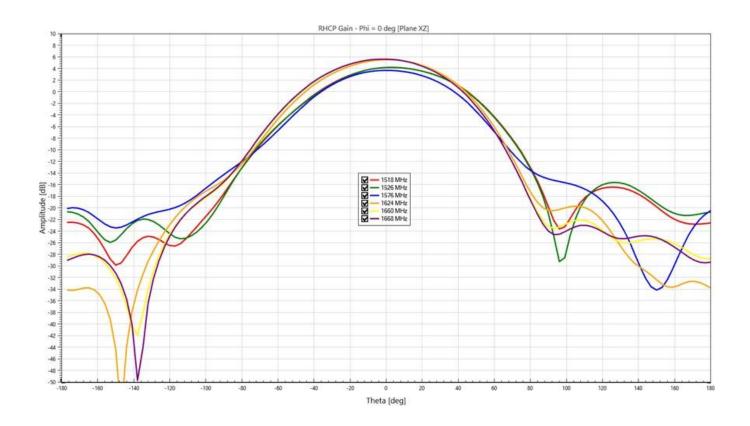






#### **RHCP, LHCP Plots**

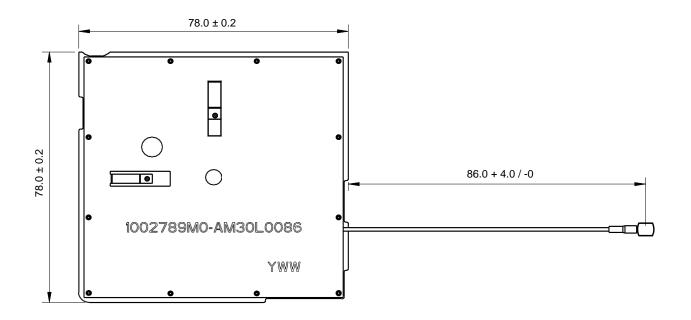
Typical performance on 457.2 x 457.2 mm metal plane Measured @ 1518 - 1675 MHz

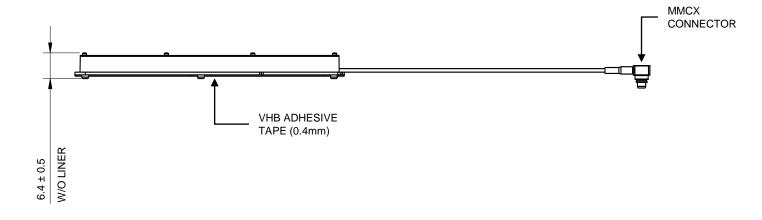




# **Antenna Dimensions**

Typical antenna dimensions (mm)





# **Typical Ordering Part Numbers**

Part Number	Polarization	Connector	Cable Length (mm)	Mounting Options
1002789M0-AM30L0086	RHCP	MMCX Compatible	86	VHB 3M5925 Adhesive