

Panasonic VIC-100 Jr. GPS Timing Antenna

Exceptional Performance in a Compact Size



RoHS Compliant

EU Radio Equipment Directive (RED) Compliant



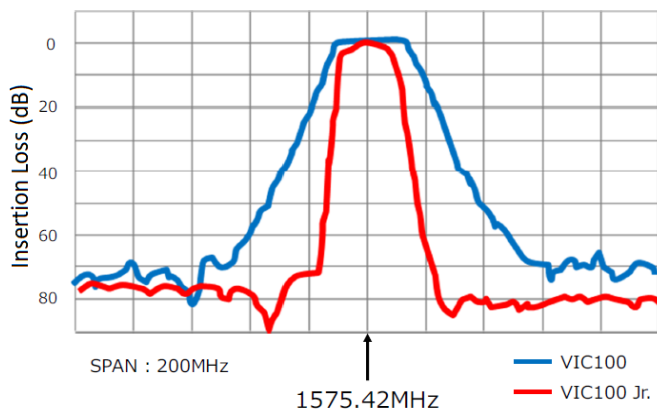
VIC-100 Jr. GPS Timing Antenna
Shown with coax interface cable

General Description:

Like the larger VIC-100 models, this smaller, more compact version is designed to provide reliable, long-term worry-free performance for telecom cell sites, small cells, network synchronization, campus networks and scientific and commercial grade timing instruments.

The lower cost VIC-100 Jr. offers a combination of high performance coupled with advanced filtering to aid in eliminating performance robbing EMI.

Two VIC-100 Jr. models are available; one standard and the other with built-in lightning resistance. Both models feature excellent filtering characteristics as shown here:



Attenuation -60 dB (Typical) at 1575.4 +/- 50 MHz

Passive Patch Summary:

Parameter	Value
Center Frequency:	1575.42 MHz +/- 1.023 MHz
Polarization:	R.H.C.P. (Right Hand Circular)
Passive Patch Gain: (Reference)	3 dBi (Typ) at elevation angle 90 deg. 0 dBi (Min) at elevation angle 90 deg. -5 dBi (Min) at elevation angle 10 deg.
Axial Ratio	5 dB (Max) at elevation angle 90 deg.

Overall Antenna/LNA characteristics:

Output VSWR:	1.5 : 1 (Typical) 2.0 : 1 (Maximum)
Nominal Impedance	50 Ohms
Filter/LNA Summary:	
3 dB band width	1575.42 +/- 10 MHz (Typical)
Variation	1.0 dB (Max) measured at L1 band
Gain	30 dB (Typical)
Attenuation	-60 dB (Typical) at 1575.4 +/- 50 MHz
Total LNA Gain	33 dB (Typ) at elevation angle 90 deg. 27 dB (Min) at elevation angle 90 deg.
Noise Figure	2.5 dB (Typical) 3.2 dB (Maximum)
IIP3	- 6.35 dBm (Minimum) at 875 MHz + 2 dBm (Minimum) at 1850 MHz + 12.4 dBm (Minimum) at 2600 MHz
1 dB Compression point (25+/-15°C)	-55 dBm at 1575.42 MHz 0 dBm (Minimum) at 1509 MHz
* Lightning Protection	+/- 4000 V per EN61000-4-5

Antenna Power Summary:

Parameter	Value
Power Input	+3.5 to 6.0 VDC
Current Draw	18 mA typ. 25 mA max.

Mechanical Characteristics:

Parameter	Value
Dimensions (w/o Connector)	Height 60 mm (2.36 Inches) Diameter 60 mm (2.36 Inches)
Base Material	Aluminum Casting
Radome Material	U/V tolerant Plastic
Weight	115 g (4.06 ounces) w/o Coax Cable
Output Connector	N Type Jack

Environmental Specifications

Humidity	< 95% RH Non-Condensing
Water & Dust Proof	IP66, IP67

* Lightning Tolerant VIC-100 Jr. Only

For configuration assistance, order placement and technical support call or Email:



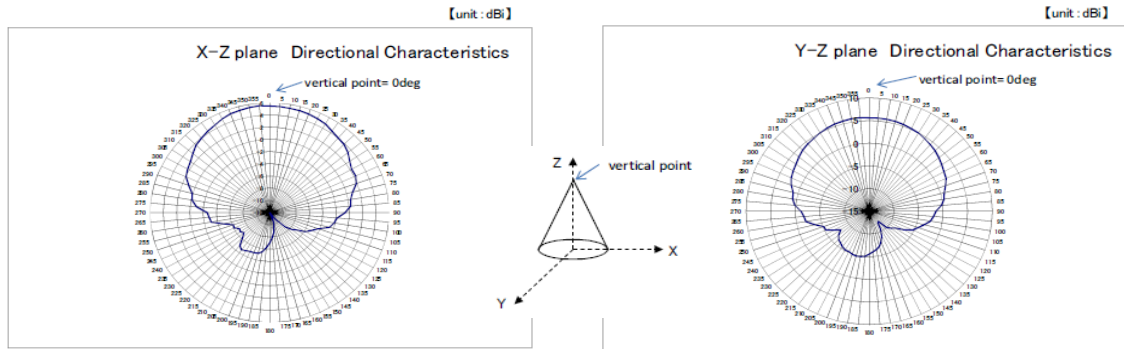
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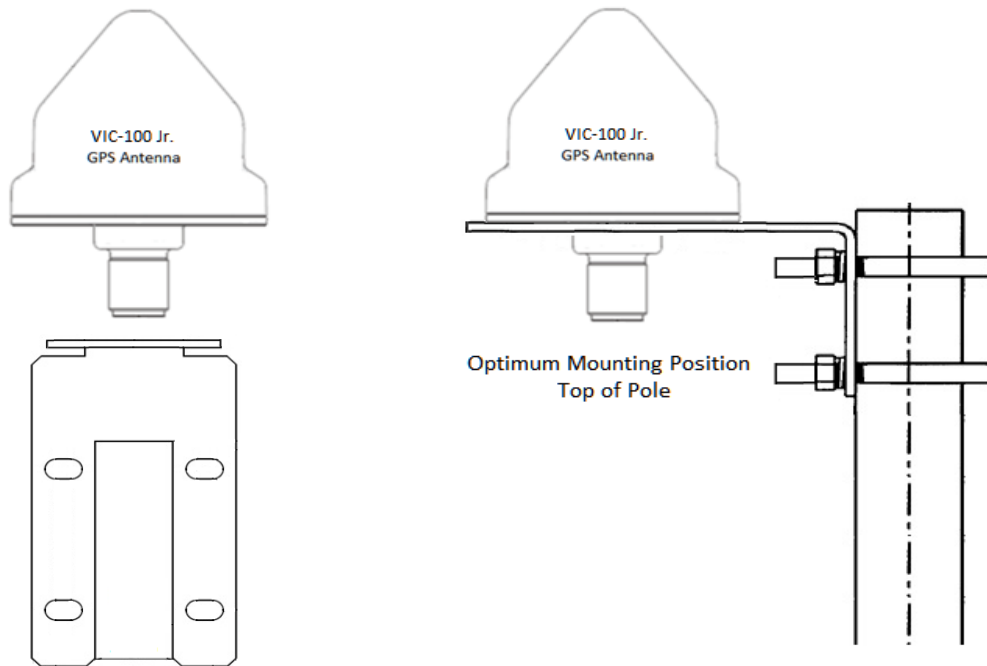
E-Mail: oeinfo@synergy-gps.com

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VIC-100 Jr. Gain Pattern



VIC-100 Jr. Mounting
Using Right-Angle Mounting Bracket



Four holes provided for mounting to a flat surface or for U-Bolts for Pipe Clamp mounting.

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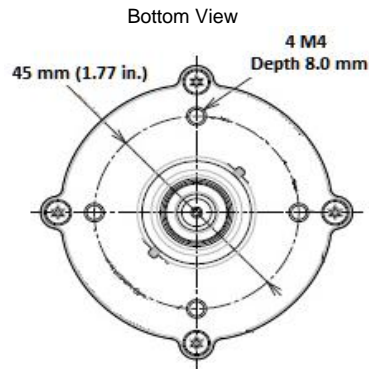
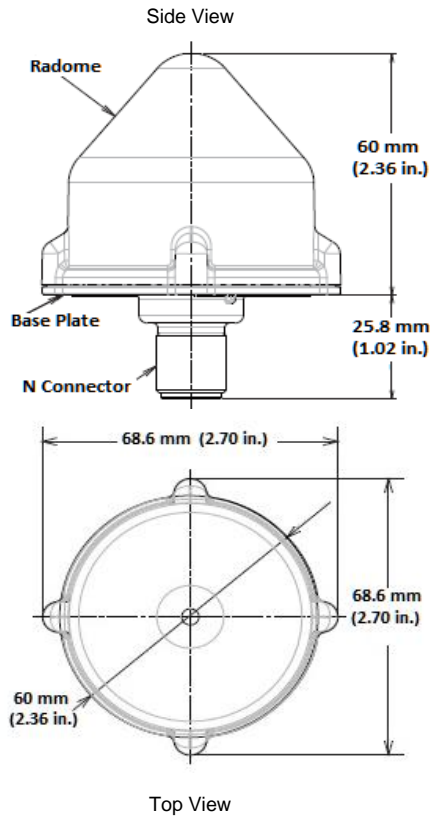
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VIC-100 Jr. Dimensions



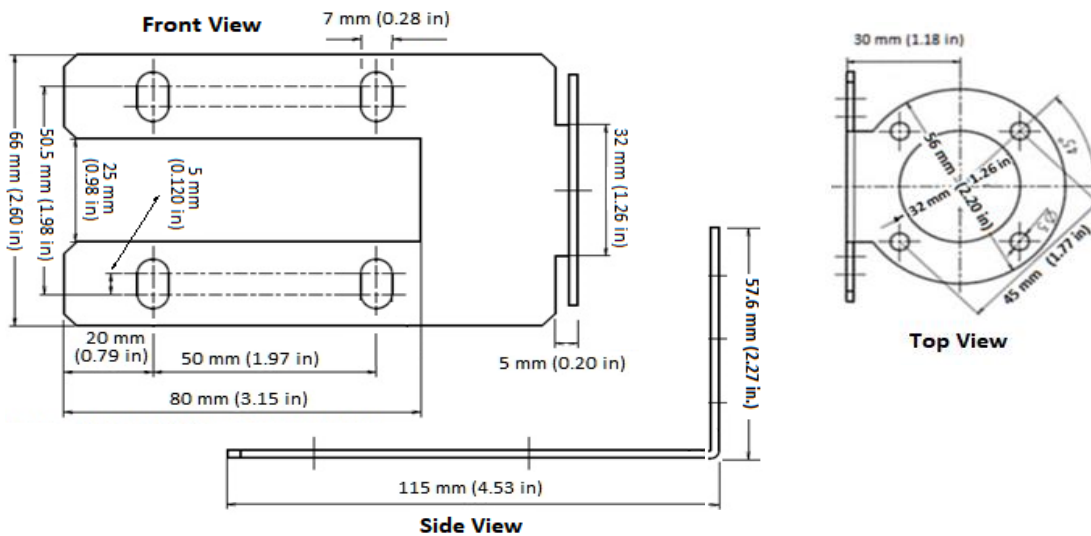
VIC-100 Jr. Ordering Information:

Part Number:	Description
10104103G	Standard VIC-100 Jr. with N Jack
10104104G	Lightning Tolerant VIC-100 Jr.

VIC-100 Jr. Mounting Bracket Ordering Information:

Part Number:	Description
43001002G	Right Angle Mounting Bracket Kit Incl. R/A Bracket, lock washers (no U-Bolts)
43001003G	Right Angle Mounting Bracket Kit Incl. R/A Bracket, lock washers and 2 U-Blots

VIC-100 Jr. Right Angle Mounting Bracket Hardware Dimensions

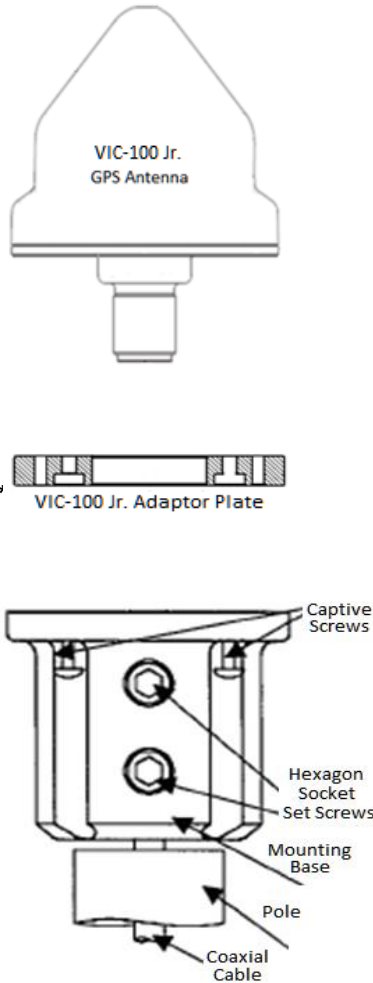


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**VIC-100 Jr. Mounting
Using Panasonic Pipe Clamp Mount**



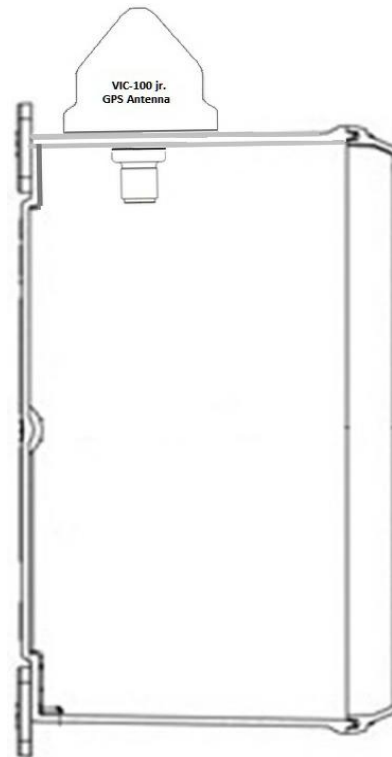
Standard VIC-100 Pipe Mount Adaptor

Pipe-Mount Ordering Information:

Part Number:	Description
Quoted on Request *	Pipe Mount Adaptor Plate
10001327	Standard Type B Pipe Clamp Mount

* Special order. Minimum quantity 25 pieces

**VIC-100 Jr. Mounting For
Hoffman Style Water-Proof
Enclosures**



**Top mounting typical for
Metal and plastic enclosures**

Note: A 10 dB coaxial attenuator is recommended when the distance between the antenna and receiver is short.

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