Panasonic

VIC100 GPS Antennas

Panasonic Canada Inc.

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The VIC100 Series antenna is an active L1 GPS antenna that is designed primarily for timing and synchronization for various industries:

- Financial
- Mobile Communication
- Transportation
- Network Timer Servers
- Seismic Monitoring Networks

Immunity to noise and interference

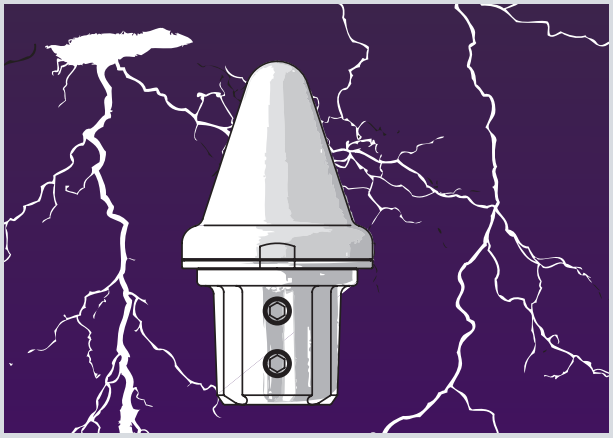
Secure performance by attenuating noise and interference near GPS L1 frequency through triple filtering design

Durability in severe environments

The VIC100 Series L1 GPS Antenna is housed in a waterproof enclosure that is designed for excellent performance under severe environment (rain, snow, etc.) with application conscious design. The unique shape of the antenna prevents accumulation of snow and ice, preventing interference from the elements and eliminating problems associated with bird perching.

Immunity to lightning surge

Due to the placement of the antenna on top of structures the VIC100 Series L1 GPS Antenna is designed with enhanced immunity to lightning surge [IEC61000-4-5 Level 4(4000V)] preventing antenna failure caused by induced lightning.



The VIC100 Series L1 GPS Antenna is designed in full compliance with the European RoHS Directive

VIC100 Series GPS Antenna

VIC100 Series with Lightning Protection

VIC100 Series with Enhanced Filter

Panasonic has been supplying the VIC100 Series of GPS antenna to provide accurate timing and synchronization reference to the wireless telecommunication industry for many years. The VIC100 Series antenna features **advanced filtering** and **immunity to noise interference** as well as **improved lightning protection**. VIC100 Series antennas are in active field operation and over time have been proven for their durability and reliability.

VIC100 Series

Physical

Dimensions: *(without connector)	90 mm D x 98.4mm H
Weight:	182/195/200/285 ±20g *Weight depends on model
Material:	
Radome:	UV-stabilized polycarbonate
Bottom housing:	Die-cast aluminum
Connector:	N-type or TNC

Applicable Models

CCAH32ST01
CCAH32ST02
CCAH32ST03
CCAH32ST04
CCAH32ST05

Specifications for VIC100 Series

Electrical

Frequency Range	1575.42 +/- 1.023 MHz
Polarization	Right-hand circular
Total Gain (@ 90° elevation angle)	38 dB (Typical) 30 dB (Minimum)
Attenuation	60dB (Typical) at 1575.42 +/- 50 MHz
Noise Figure	1.8dB (Typical) 2.2 dB (Maximum)
VSWR	1.5 (Typical) 2.5 (Maximum)

Power

Operating Voltage	DC 5V +/- 0.5 V
Operating Current	20mA (Typical) 27mA (Maximum)

Environmental

Operating Temperature	-40 to +85° C
RoHs Compliant	YES
Lightening Surge Protection	80V (Typical) for IEC1000-4-5 standard

VIC100 Series w Enhanced Lightning Surge

Physical

Dimensions: *(without connector)	90 mm D x 98.4mm H
Weight:	182/195/200/285 ±20g *Weight depends on model
Material:	
Radome:	UV-stabilized polycarbonate
Bottom housing:	Die-cast aluminum
Connector:	N-type or TNC

Applicable Models

CCAH32ST12
CCAH32ST13
CCAH32ST14
CCAH32ST15
CCAH32ST16

Specifications for VIC100 Series w Enhanced Lightning Surge

Electrical

Frequency Range	1575.42 +/- 1.023 MHz
Polarization	Right-hand circular
Total Gain (@ 90° elevation angle)	38 dB (Typical) 30 dB (Minimum)
Attenuation	60dB (Typical) at 1575.42 +/- 50 MHz
Noise Figure	1.8dB (Typical) 2.2 dB (Maximum)
VSWR	1.5 (Typical) 2.5 (Maximum)

Power

Operating Voltage	DC 5V +/- 0.5 V
Operating Current	20mA (Typical) 27mA (Maximum)

Environmental

Operating Temperature	-40 to +85° C
RoHs Compliant	YES
Lightening Surge Protection	4000V for IEC1000-4-5 standard

For TNC Connector

TNC Connector

+ Mounting Base A

Pole Mount Adapter

For N Connector

N Connector

Mounting Base B

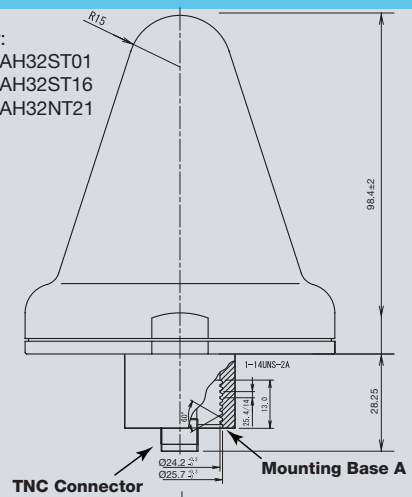
Blue base denotes enhanced filter models

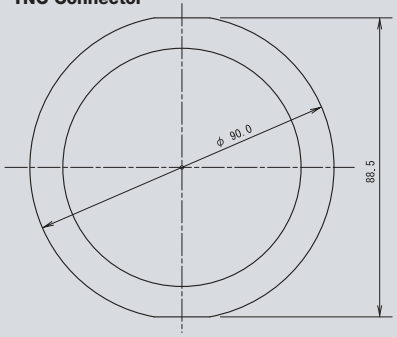
GPS Antenna Selection Guide

Model	Connector	Mounting Base Type
VIC100 Series Series		
CCAH32ST01	TNC	A
CCAH32ST02	TNC	B
CCAH32ST03	N	Ant. Only
CCAH32ST04	N	B
CCAH32ST05	TNC	Ant. Only
VIC100 Series Lightning Surge Protection		
CCAH32ST12	TNC	B
CCAH32ST13	N	Ant. Only
CCAH32ST14	N	B
CCAH32ST15	TNC	Ant. Only
CCAH32ST16	TNC	A
VIC100 Series Top Filter Series		
CCAH32NT21	TNC	A
CCAH32NT24	N	B
Pole Mount Antenna Adapter		
GPS-N-MT2	Works with TNC connector + A-type Mounting Base	

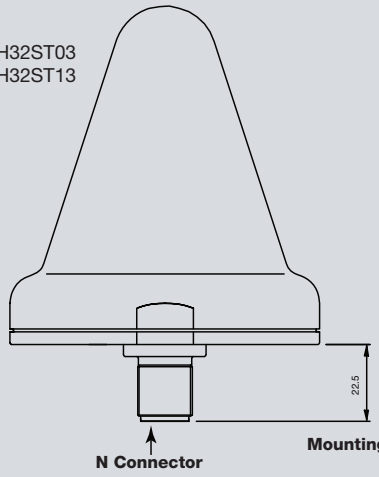
GPS Antenna Dimensions

For:
CCAH32ST01
CCAH32ST16
CCAH32NT21

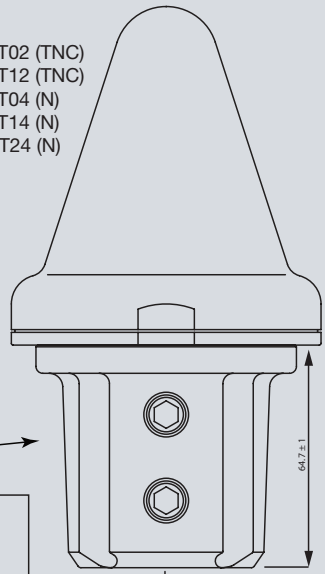


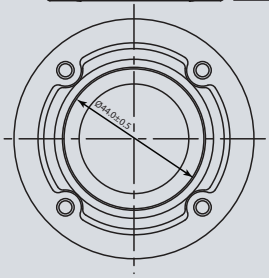


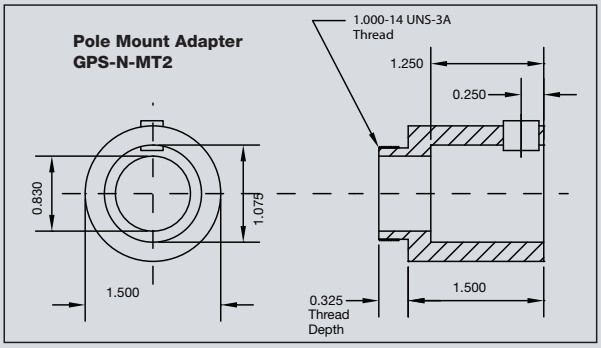
For:
CCAH32ST03
CCAH32ST13



For:
CCAH32ST02 (TNC)
CCAH32ST12 (TNC)
CCAH32ST04 (N)
CCAH32ST14 (N)
CCAH32NT24 (N)







*Dimensions of CCAH32ST05, CCAH32ST15 can be provided if requested
*All dimensions are in mm

GPS Antenna with Enhanced Filtering

For applications that require superior noise performance…

Panasonic enhanced filter technology provides long-life, reliable service in the GPS L1 frequency band for applications that may be subject to severe interference from extenal forces.

Durability in servere environment

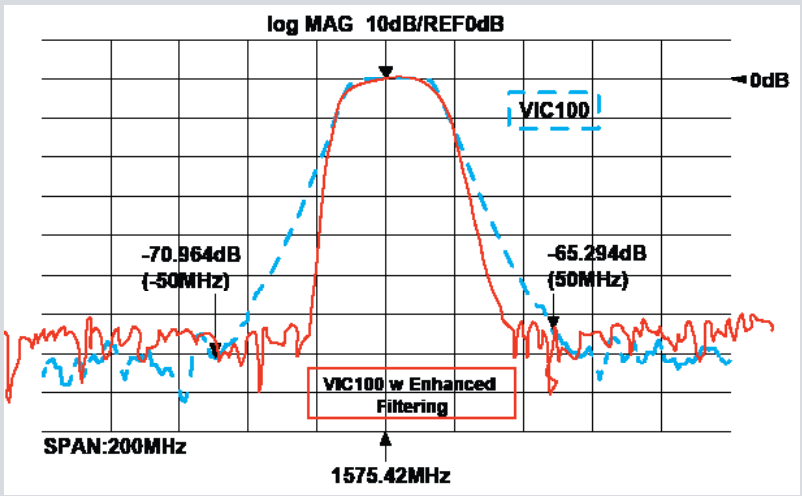
Excellent performance under severe environment (rain, snow, etc.) with application conscious design.

Blue Bottom Identifier

Blue bottom identifier provides visual indication of newly installed enhanced filtering GPS L1 Antennas.

Immunity to noise interference

Secure performance by attenuating noise and interference near GPS L1 frequency through special filtering design.



VIC100 Series w Enhanced Filtering

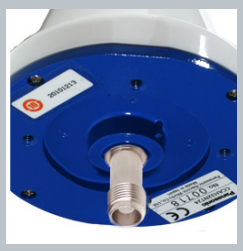
Physical	
Dimensions:	90mm D x 98.4mm H
*(without connector)	
Weight:	200/295 ±20g
	*Weight depends on models
Material:	
Radome:	UV-stabilized polycarbonate
Bottom housing:	Die-cast aluminum
Connector:	N-type or TNC
Blue Bottom Identifier	

Applicable Models
CCAH32NT21
CCAH32NT24

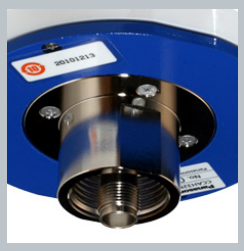
Specifications Series for VIC100 w Enhanced Filtering

Electrical	
Frequency Range	1575.42 +/- 1.023 MHz
Polarization	Right-hand circular
Total Gain (@ 90° elevation angle)	34 dB (Typical) 27 dB (Minimum)
Attenuation	65dB (Typical) at 1559.42, 1625 MHz
Noise Figure	4dB (Typical) 5dB (Maximum)
VSWR	1.5 (Typical) 2.5 (Maximum)
Power	
Operating Voltage	DC 5V +/- 0.5 V
Operating Current	23mA (Typical) 30mA (Maximum)
Environmental	
Operating Temperature	-40 to +85° C
RoHs Compliant	YES

For TNC Connector



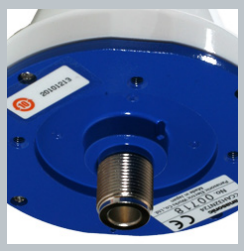
TNC Connector



+ Mounting Base A

Pole Mount Adapter

For N Connector



N Connector

Mounting Base B

Blue base denotes enhanced filter models

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