Information Station Specialists, Inc.

www.theRADIOsource.com

PRODUCT INFORMATION SHEET

Component Vertical Profile Antenna Support and Grounding System

Part Number VP.9000

Image



Description When space is at a premium, the Vertical Profile Antenna Support and Grounding System (VP.9000) offers the solution. Place the VP.9000 System in the area adjacent to the building or outdoor cabinet where the radio equipment is located.

The Vertical Profile Antenna Support and Grounding System is comprised of an attractive painted aluminum antenna support pole and antenna grounding system, all in one. The antenna lightning arrestor and all cable are inside the pole, accessible through a service hatch. There is nothing on the surface of the support pole to encourage vandalism.

Advantages: Minimal ground disturbance (less than one square foot, horizontal; six-foot depth, vertical). No additional antenna groundplane or rod are required; therefore, it is an easy antenna system to move.

This antenna system is recommended for high visibility areas and features low vandalism potential and low installation cost. The support pole with a 1400-1710 kHz antenna meets and exceeds Florida's hurricane-force wind specifications (see "Specifications" below).

Installation Requirements: Placement of the Vertical Profile Antenna is typically within 50 feet of a building (but may be at a greater distance, if the design requires) in grass, dirt or paved areas. Vehicles may be parked next to the system; however, the support pole should be guarded from vehicle damage. No objects taller than 25 feet should be within 50 feet. Coaxial cable to the support pole may be buried or installed overhead. The pole is set in a 6-foot post hole with good earth contact in the lowest 4 feet of the hole. (When used on AM frequencies below 1000 kHz, a 20-foot solid ground rod is driven beside the pole.) Concrete, asphalt or tamped dirt may surround the pole within

All products described are subject to availability based on manufacturing capacity and shipping dates. While every effort has been made to ensure the accuracy of all information, ISS does not accept liability for any errors or omissions and reserves the right to change information as needed.

© 2023 Information Station Specialists, Inc. All rights reserved.

Information Station Specialists • PO Box 51 • Zeeland, MI 49464-0051 USA • Phone 616.772.2300 Web theRADIOsource.com

www.theRADIOsource.com

PRODUCT INFORMATION SHEET

2 feet of the surface.

The Vertical Profile Antenna Support and Grounding System is engineered to and compliant with ANSI/TIA-222-G-2005 (Class III, Category 4, Exposure D) standard. This means it is rated to perform in worst-case environments, such as, unobstructed shorelines in hurricane-prone areas and atop ridges in terrain where wind speeds can achieve great force. Additionally, it is rated for essential communications in critical areas where failure of a structure could damage buildings or present a hazard to life. To achieve these designations, the VP.9000 has to be able to sustain 130 mph/3-second gust winds without failure. The Vertical Profile Antenna Support and Grounding System is compliant with ANSI/TIA -222-G-2005 standard for frequencies 1400-1710 kHz when installed in soil types per Annex F of the standard.

In a separate study, when used with AM frequencies 1400-1710 kHz VP.9000 is rated to meet increased coastal hurricane wind-speed requirements (150 mph in a 3-second gust), for South Florida and other coastal areas.

- Space requirement: less than 1 square foot.
- RF exposure separation: 1 meter minimum recommended at fewer than 1000 watts both occupational and controlled environments.
- RF grounding element: 4-foot length; integral to support pole.
- Lightning ground: 8-foot groundrod, copper clad.
- Support pole composition: aluminum, 6-inch OD, .3125-inch wall thickness.
- Support pole length: 24 feet.
- Support pole finish: powder coat, silver/gray.
- Support standing height: 18 feet above grade; 6 feet below grade.
- Wind: hurricane rated. 1400-1710 kHz, support pole exceeds Florida Dade/Broward County windload requirements with attached antenna, greater than 146 MPH/3-second gusts. 530-1390 kHz, support pole meets and exceeds Florida windload requirements with attached antenna, 130 MPH/3-second gusts. (Florida Building Code 2001).
- Internal components: RF lightning arrestor, grounding bus, coaxial feedline:
 - o Provided in a weatherproof NEMA4 cabinet, arrestor bonded to an aluminum panel that supports the lightning grounding and groundplane connection clamps.
 - o Capacity of 50,000 amps surge.
 - o Clamping speed of less than 2.5 nS.
 - o 2 UHF connectors.
 - o Aluminum flange ground connection.

All products described are subject to availability based on manufacturing capacity and shipping dates. While every effort has been made to ensure the accuracy of all information, ISS does not accept liability for any errors or omissions and reserves the right to change information as needed.

© 2023 Information Station Specialists, Inc. All rights reserved.

Information Station Specialists • PO Box 51 • Zeeland, MI 49464-0051 USA • Phone 616.772.2300 Web theRADIOsource.com www.theRADIOsource.com

PRODUCT INFORMATION SHEET

- External components: threaded attachment for antenna mount, weatherproof service hatch with tamperproof hardware. Crane hook.
- Frequencies: 530-1710 kHz.
- Compliant with ANSI/TIA-222-G-2005 standard (Class III, Category 4, Exposure D) 130 mph/3-second gust for frequencies 1400-1710 kHz when installed in soil types per Annex F of the standard.
- Maintains safe human RF exposure distance from the AM antenna, per FCC Guidelines (per ANSI/IEEE C95.1-1992 standard).

All products described are subject to availability based on manufacturing capacity and shipping dates. While every effort has been made to ensure the accuracy of all information, ISS does not accept liability for any errors or omissions and reserves the right to change information as needed.

© 2023 Information Station Specialists, Inc. All rights reserved.

Information Station Specialists • PO Box 51 • Zeeland, MI 49464-0051 USA • Phone 616.772.2300 Web theRADIOsource.com