Information Station Specialists, Inc.

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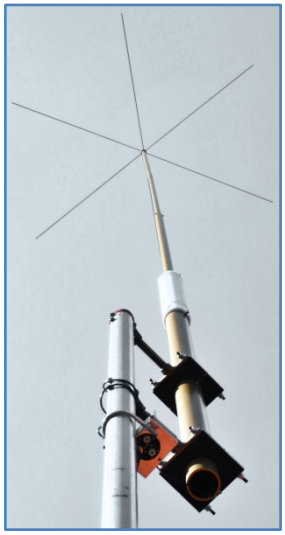
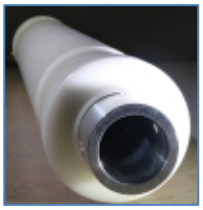
PRODUCT INFORMATION SHEET

Component AM Radio High Performance Antenna

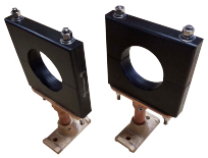
Part Number HPR.0990

Images





The heavy-duty HPR.0990 Antenna Coil can handle hundreds of watts efficiently.



Accessory: M990 Insulators with Stand-Off Mounts

Description

This high performance antenna offers a communication professional the ability to establish an AM broadcast signal more efficiently than before possible with an antenna of similar design and price point. Its 50-ohm resonant design requires only a matching transformer at its feed-point, eliminating the need for an antenna tuner (matching network). Designed to operate in conjunction with a horizontal groundplane, this antenna is compact and light-weight, making it easy to ship, set up and install. It may be assembled in minutes, if required, for an emergency application.

- Power: up to 300 watts carrier (1000-1700 kHz); reduced power below 1000 kHz.
- Frequency range: 470 kHz to 1800 kHz.
- Impedence: 10-20 ohms (typically) with 50' tip height and 50' radius groundplane.
- Mounting Format: Top of support structure [tower, mast or pole]. Lower 36" of antenna base clamps in insulator mounts which can be attached to a vertical support with a round or flat surface.
- Type: center-loaded, bottom-fed vertical, whip-type antenna with adjustable capacitive hat and adjustable vertical tuning section . Omni directional. Anodized aluminum finish. Guying ring included.
- Radiation efficiency: 54 mV/m/km; (530 kHz) to 175 mV/m/km (1700 kHz). Ref 1KW: 50' tip height above ground on a 20' support pole or tower with 50' 32-element groundplane.
- Bandwidth varies with frequency (3:1 SWR): 530 kHz: 6 kHz. 1700 kHz: greater than 10 kHz.

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- Temperature endurance: -40°C to 85°C.
- Wind endurance: greater than 100 MPH, unguyed. Greater than 140 MPH with the addition of guy lines (nonconductive only).
- Weight of the complete antenna varies with frequency. 30.5 lbs nominal. Mounts with insulators (2): 5.5 lbs total.
- Overall assembly: five sections plus capacitive hat. Length varies with frequency and tip extension. Typical: 32'. Includes assembly hardware. Outside diameter of vertical sections taper from 2.5" (lower) to 1.0" (upper). Capacitive hat spoke length varies with frequency.
- Recommended separation from buildings and structures: 100' or equal to the height of the structure, whichever is greater.
- Required: stand-off mounts with insulators. Options: matching transformer, lightning arrestor, weatherproof cabinets, coaxial cable with connectors, guying kit, support poles and masts, roof stands, fully assembled portable groundplanes.
- RF exposure separation: 1 meter minimum recommended for both occupational and controlled environments.