



OD3-220 Series

Omni-directional for PTC Positive Train Control

- Rugged site antenna, fiberglass radome and heavy aluminum base
- Antenna can handle up to 200 Watts
- Covers Positive Train Control frequencies, 217-222 MHz
- Hardware provided for heavy duty pipe mount

The OD3-220-WHT Antenna is designed to provide omni-directional coverage as part of a Positive Train Control (PTC) network.

The antenna offers 3 dBi gain, a level of gain that provides broad vertical beamwidth and good coverage in a PTC network. The antenna can be used at network hubs or along the rail-line as part of a Wayside network.

The OD3-220-WHT antenna provides omni-directional 360° coverage in the horizontal plane and 80° coverage in the vertical plane.

The antenna can handle a maximum power of 200 Watts. It is rated for a temperature range of -40°C to +80°C and has a wind survivability of 100 mph minimum.

This high performance, durable antennas will provide dependable coverage. In addition to being electrically efficient, it is also mechanically sound. The antenna has a white fiberglass radome and a heavy aluminum base.

The OD3-220-WHT has been tested to Military and Industrial standards EN 300 019-2-4 and IEC 60068 for shock & vibration. In addition, the antenna is rated IPx5 for Water Ingress.

The antenna measures 41 inches (104cm) from the tip of the radome

to the bottom of the antenna base. The diameter of the antenna is a slim 1" (25mm) which contributes to its favorable wind survivability rating.

The antenna terminates with an N jack (female) connector. Cable assemblies to connect the antenna to the radio are available separately from Mobile Mark.

Signal loss can occur along the length of the cable connection so it is recommended that the antenna be mounted as close as possible to the modem, or that the connecting installation be done with high quality, low loss cable.

The antenna itself is attached to the mounting brackets with medium "U" bolts and the large "U" bolts are used to attach the mounting plate to the mounting pole or pipe. The large "U" bolts can accommodate an outside diameter (O.D.) pole or pipe of up to 2 1/2 inches (63mm). The mounting hardware to pole mount the antenna is provided.

Model #	Gain	Description
OD3-220-WHT	3 dBi	Omni-directional Rod antenna for PTC

Specifications			
Frequency:	217-220 MHz	Dimensions:	41 1/4" H x 1" D (105cm x 25mm)
Gain:	3 dBi	Weight:	2.5 lbs (5.5 kg)
VSWR Max:	2:1 max over range	Mounting:	Up to 2 1/2" (6.4 cm) OD Pipe Wall mount (optional)
Impedance:	50 OHM Nominal	Connector:	N Jack (female)
Max Power:	200 Watts	Shock & Vibration:	EN 300 019-2-4, IEC 60068
Beamwidth:	80° vertical	Water Ingress:	IPx5
Operating Temp:	-40° to +80° C		
Lightning Protection:	External Recommended		
Max Wind Velocity:	100 mph minimum		
Material:	White Fiberglass		