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MobileMark
antenna solutions

# Multi-band, Wayside Cellular, WiFi, GPS

- 3 antennas in 1 antenna housing
- Designed for Wayside wireless systems
- Pipe Mount

Mobile Mark's site antenna solutions provide a range of coverage patterns and can communicate on different frequency bands. This antenna incorporates multiple antennas within a single antenna package.

This WA Series Antenna was designed for Wayside wireless systems. These systems rely on multiple wireless technologies to track trains as they cover long distances between train stations. Designed & built with heavy duty construction to survive the rigors of railroad use.

This antenna combines Cellular LTE and GPS. This antenna contains 3-elements all within the same radome. The first and second elements cover 694-894 & 1710-2170 MHz and the third covers GPS at 1575 MHz.

The WA antenna provides 2 dBi gain on the element, 5 dBi gain on the WiFi element, and 5 dbi gain with a 26 dB amplifier on the GPS element. The antennas will handle 10 watts of power.

The pole mount models use a ¾-inch feed thru (19 mm) for securing to the vehicle. Access to the underside of the body surface is required to complete the installation of the WA series.

The antenna is enclosed in a 6.5"D x 5.3"H (2m x 1.6 m) weatherproof radome,. The radome is available in white.

## Model Configurator

WA □ □□ □□ - □□□ - □□□

- Cable/Con 1
- Cable/Connector 2
- Cable/Connector 3
- Color
- Cable Length in Inches (eg. 12 or 180)

| Cable Options: | | Connector Options: | | Color Options: | |
|---|---|---|---|---|---|
| Code | Cable | Code | Connector | Code | Color |
| 1 | RG-58 | A | TNC | WHT | White |
| 2 | RG-174 | B | Mini UHF | | |
| | | C | SMA | | |

(Other Configurations available.)

## Specifications

| | |
|---|---|
| Frequency & Gain (peak): | |
| Cable 1 | 694-894 MHz, 2 dBi & 1710-2170 MHz, 5 dBi |
| Cable 2 | 694-894 MHz, 2 dBi & 1710-2170 MHz, 5 dBi |
| Cable 3 (GPS) | 1575.42 +/- 2 MHz, LNA 26dB 5 dBi nominal RHCP, Antenna |
| VSWR: | <2:1 max over range |
| Nominal Impedance: | 50 ohms |
| Power: | 10 Watts |
| GPS: | |
| Noise Figure | 2.0 dB max, 1.7 dB typical |
| Amplifier Bias | 3.3 /5 VDC |
| Amplifier Current | 20 mA, 10 mA typical |
| GPS Option: | 1575 MHz |

| | |
|---|---|
| Case: | 6.5"D x 5.3"H (2 m x 1.6 m) |
| Case Material: | White ASA Plastic |
| Cable: | |
| Cables 1 & 2 | RG-58 cable, 3.5 ft (1.06 meters) |
| Cable 3 (GPS) | RG-174, 3.5 ft (1.06 meters) |
| Connectors: | "N" Plug Connector |
| Mounting: | Aluminum Pipe Mount to fit 1 1/4" Pipe |
| Max Wind Velocity: | 150 MPH |
| Operating Temp: | -40° to +80° C |