RFID Race Timing Mat Antenna

Model: WS-RAM2-U925

(Designed for Running Events | 902~928 MHz | Modular Length & Connector System)

This antenna is specifically designed for RFID timing systems used in marathons, road races, and similar sports events. It offers excellent read performance and flexible on-site deployment.

With high gain and circular polarization, it delivers strong anti-interference capability and signal stability. The modular design enables easy assembly and integration, featuring unit-based connectors per meter for flexible configuration and convenient installation.

Its flat-profile structure resists wind, rain, and snow, and provides enhanced concealment—ideal for venues requiring aesthetic appeal or low visibility. Suitable for a wide range of large-scale outdoor events, including RFID timing in road race applications and wireless data transmission in IoT environments.

Key Specifications

| Item | Specification |
|----------------------|-----------------------|
| Frequency Range | 902~928 MHz |
| Gain | 8.5 dBi (±0.5) |
| H/V Beamwidth | 65° ±5° / 65° ±5° |
| VSWR | ≤2.0 |
| Input Impedance | 50 Ω |
| Polarization | Circular Polarization |
| Axial Ratio | ≤3 dB |
| Max Power | 50 W |
| Lightning Protection | DC Grounding |

Structural Characteristics

| Item | Specification |
|--------------------------------------|--------------------|
| Connector Type | SMA or TNC |
| Cable Exit | Side Feed |
| Dimensions (per unit) | 1000 × 333 × 22 mm |
| Weight | 4 kg |
| Housing Material | PC+ABS |
| Color | Blue |
| Ingress ProtectionIngress Protection | IP67 |
| Operating Temperature | -40°C ~ +55°C |

Application

- Ideal for use at start/finish lines and race corridors in marathons, road runs, and other athletic events. Supports high-speed RFID chip detection and accurate timing.
- Modular unit design provides flexible cabling, suitable for both temporary setups and permanent installations.
- Waterproof and impact-resistant construction ensures reliable operation under diverse weather conditions and outdoor ground environments.