



MaxFin Antenna

DSRC Mobile Antenna 2xDSRC, 1xGNSS

- DSRC and GPS or GPS/Glonass
- Ground plane independant
- Available as Surface or Mag-mount

The MXF-5900 Series is designed to optimize DSRC performance in Mobile Antennas used in ITS trials. The antennas contain 3-antenna elements; two identical DSRC elements and one GNSS element.

Both DSRC elements are centered on 5.9-6.0 GHz and the GNSS element covers either GPS at 1575 MHz or combination GPS & Glonass at 1575 & 1602 MHz. Model numbers for antennas with both GPS & Glonass start with MXFG.

The DSRC elements are uniquely placed to eliminate shadowing on these critical antenna elements, providing consistent and balanced coverage in all directions. Shadowing can also be caused by antenna position, so roof-mounting is recommended to eliminate any shadowing caused by the vehicle itself and to allow optimum line-of-sight signals.

The New MaxFin Antenna has been well received because it is compact, attractive and high performance. The antenna housing contains a stylish combination of matte & polished finish, providing a sleek, high-tech look on the vehicle.

The MXF-5900 antenna is ground-plane independent and can be mounted on either a metal or fiberglass roof. It can handle up to 10 watts of power.

This antenna is also available in a mag-mount version; the mag-mount style is popular for system testing when the antenna needs to be moved quickly and easily from car to car. The model number for the mag-mount version starts with MMXF.

| Model # | Mounting |
|--|---------------|
| MXF-5900-3C3C2C-BLK-180 | Surface Mount |
| MMXF-5900-3C3C2C-BLK-180 | Magnet Mount |
| Add "G" to MXF to specify GPS/Glonass, e.g. MXFG-5900 Add "M" to specify Magnet Mount, e.g. MMXF-5900 | |

| Specifications | | | |
|-----------------------|--|-------------------|---|
| Frequency & Gain: | | MMXF Dimensions: | 7.5"L x 2.25"W x 2.95"H (19cm x 5.7cm x 7.5cm) |
| Cable 1&2 (DSRC): | 5850-5925 MHz | Case Material: | ASA UV Inhibitive Plastic, Black |
| Cable 3 (GPS): | 1575 MHz | Cable 1&2 (DSRC): | LL-195, 15ft (4.5m) |
| GPS & Glonass Option: | 1575 & 1602 MHz | Cable 3 (GPS): | RG-174, 15ft (4.5m) |
| Gain: | | MXF Mounting: | Stud mount (5/8-24 Thread) Mounts to surfaces .20" (5mm) thick |
| Cable 1&2 (DSRC): | 4dBi (average), 8dBi (peak) | MMXF Mounting: | Magnet |
| Cable 3: | LNA 26dB, 5dBi nominal RHCP | Connectors: | SMA Plugs (male) |
| VSWR: | < 2:1 over range | Operating Temp: | -40° to +80° C |
| Nominal Impedance: | 50 ohms | | |
| Maximum Power: | 10 Watts | | |
| GPS: | | | |
| Noise Figure: | 2.0 dB max, 1.7 dB typical | | |
| Amplifier Bias: | 3.3/5 VDC | | |
| Amplifier Current: | 20 mA max, 10 mA typical | | |
| MXF Dimensions: | 7.5"L x 2.25"W x 2.5"H (19cm x 5.7cm x 6.4cm) | | |