US Office: Tel: 800.648.2800 or +1.847.671.6690
UK Office: Tel: (+44) 1543 459 555
www.mobilemark.com

MobileMark
antenna solutions

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:	
Cable 1&2 (DSRC):	5850-5925 MHz
Cable 3 (GPS):	1575 MHz
GPS & Glonass Option:	1575 &1602 MHz
Gain:	
Cable 1&2 (DSRC):	4dBi (average), 8dBi (peak)
Cable 3:	LNA 26dB, 5dBi nominal RHCP
VSWR:	< 2:1 over range
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)

MMXF Dimensions:	7.5"L x 2.25"W x 2.95"H (19cm x 5.7cm x 7.5cm)
Case Material:	ASA UV Inhibative Plastic, Black
Cable 1&2 (DSRC):	LL-195, 15ft (4.5m)
Cable 3 (GPS):	RG-174, 15ft (4.5m)
MXF Mounting:	Stud mount (5/8-24 Thread) Mounts to surfaces .20" (5mm) thick
MMXF Mounting:	Magnet
Connectors:	SMA Plugs (male)
Operating Temp:	-40° to +80° C
Dust & Water Ingress	When Properly Mounted IP69K (Stud Mount) IP67 (Mag-Mount)

Specifications subject to change without notice(8/2025)