

SDAR (Satellite Digital Audio Radio) Antenna

MODEL: XM-38



- High Gain & Low Noise
- ESD Resistance up to 8KV (Contact Discharge)
- Waterproof for Better Reliability
- Sirius and XM Radio Compatible

Applications

- Performance Enhancement for Satellite Digital Audio Radio Systems with a Switch Circuit for an Optional Antenna
- Sirius Radio (U.S.) compatible car/ table/ portable radios and other kinds of radios
- XM Radio (U.S.) compatible car/ table/ portable radios and other kinds of radios

Specification

| PHYSICAL CONDITION | |
|-------------------------|---|
| Constructions: | Polycarbonate radome, detachable cable/connector for easy mount, rubber-O-ring between top radome and screw base for waterproof |
| Dimensions: | 40.5mm (L) x 38mm (W) x 12.3mm (H) |
| Weight: | 50grams (w/o cable & connector). |
| Color: | Standard in ivory black |
| Standard Mounting | Magnet mount with two magnets & screw mount |
| Cable & Connector | |
| RF cable: | 5 meter RG174 |
| Pulling strength: | 6 Kg @ 5sec. molded plastic on connector end for strain relief. |
| Connector | SMA / SMB / SMC / MCX / MMCX / BNC / TNC / ----- |
| Antenna Element | |
| Center Frequency: | 2338.75 MHz +/-6.25 MHz |
| Polarization: | R.H.C.P. (Right Handed Circular Polarization). |
| Absolute Gain @ Zenith: | +2 dBi typical. |
| Gain @ 10° Elevation: | 1 dBi typical. |
| Axial Ratio: | 3 dB max. |
| Output VSWR: | 2.0 max |
| Output Impedance: | 50 ohm |
| Low Noise Amplifier | |
| Center Frequency: | 2338.75+/-6.25 MHz |
| Power Gain: | 30db +/-1db |

| | |
|---|---|
| Bandwidth: | 10 MHz min. |
| Noise Figure: | 1.0 typ |
| Outer Band Attenuation: | 10 dB min. @ Fo +/-10 Mhz. |
| Supply Voltages: | 4~5.5V DC. |
| Current Consumption: | 4V : 10.3 mA Typical 4.5V : 12 mA Typical 5V: 13 mA Typical 5.5V: 15 mA Typical |
| Output Impedance: | 50W ohm |
| Overall Performance: (antenna element, LNA & coax cable) | |
| Center Frequency: | 2338.75+/-6.25 Mhz. |
| Gain: | At 90° vertical to sky 30 ± 4.5dBi (cable loss) Note:1 Mounted on the 60mm x 60mm square ground plane |
| Noise Figure: | 1.0 max. |
| Axial Ratio: | 2 dB max. |
| Bandwidth: | 10 MHz min. @ S11≤-10 dB |
| VSWR: | 2.0 max. |
| Output Impedance: | 50W ohm |
| Environmental | |
| Operating Temperature: | -40°C~ +85°C. |
| Storage Temperature: | -40°C~ +90°C. |
| Relative Humidity: | 95% non-condensing. |
| Water Resistance: | 100% waterproof. |

* This specification is subject to change without prior notice

Data Updated: JUL.02, 2010