



# Satellite Antenna

## *Radio and Weather*

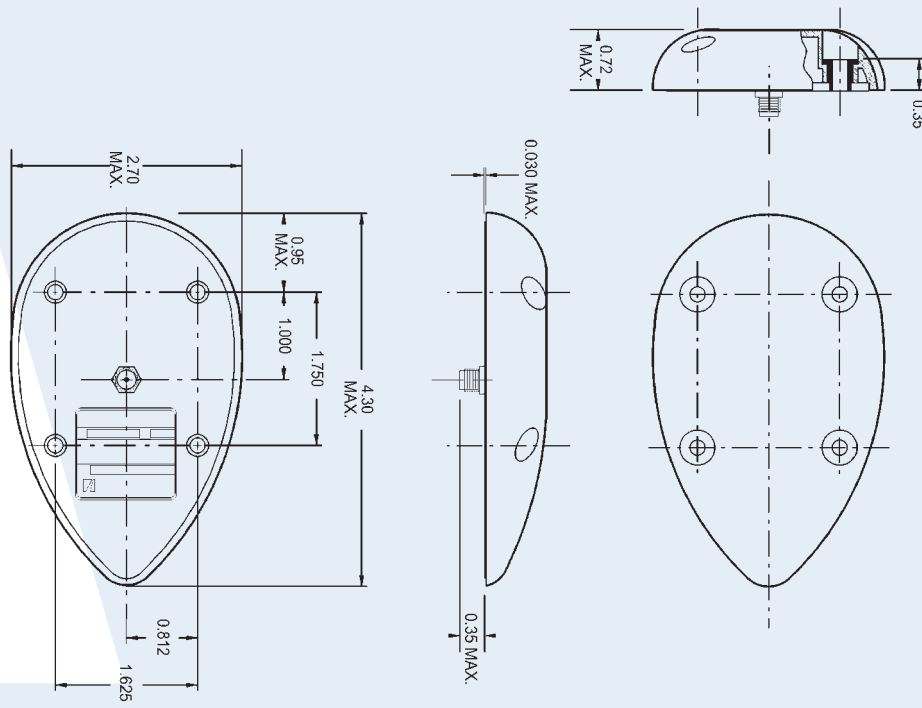
XM Satellite Radio was the first to bring you 101 channels of your favorite music, news, sports and talk programs. And now, XM WX brings you the most comprehensive weather data available. The same proven technology used by broadcast meteorologists across the country now brings Nexrad radar, lightning data and much more direct to your cockpit.

The best value on the market, XM WX Satellite Weather features affordable, unlimited-use subscription plans, the most cost effective receivers, and wide ranging display options. And, now you can have the combined benefits of weather data plus award-winning XM Radio service, all through a single antenna.



HEADS UP TECHNOLOGIES





# XM Radio/Weather Antenna

XM's advanced digital satellite broadcast infrastructure provides the optimum method of transmitting the XM WX Satellite Weather data to aircraft flying anywhere within the contiguous United States and coastal waters. XM's advanced technology allows for dependable reception of the XM signal in any weather conditions. Using compact receiver modules with small antennas, XM achieves the significant breakthrough of affordable graphical weather information delivery to aircraft while in flight.

## Options

Heads Up provides users options from two XM Satellite Radio approved antennas - the popular low-profile, teardrop shaped antenna (XMRANT-01) or the new combination VHF/COM - XM antenna (XMRANT-02).

By combining antennas, installations are simplified and labor hours are reduced. New systems can be added without adding antennas. Not only is drap reduced, your aircraft will look great.

## Audio or Data or BOTH!

Regardless of your choice, both style antennas provide the ability to receive XM's 101 channels of music, news and entertainment as well as the XM WX Satellite Weather information. In fact, up to eight total receivers (any combination of radio and/or data receivers) can be powered by a single antenna - offering you growth and flexibility at an affordable price.

## RF Characteristics

- Frequency 2332.5 - 2345.0
- VSWR 1.5:1 Max
- Polarization Left Hand Circular
- Radiation Pattern Hemispherical
- Impedance 50 Ohms Output (nominal)
- Gain\* 4 dBic +/- 1dB Nom. Zenith  
\*(measured on 4' circular ground plane)

## Amplifier/Physical Characteristics\*

- Gain 26 to 30 dB
- D.C. Voltage 4.7 VOLTS TYP / 5.5 VOLTS MAX
- D.C. Current 45 mA TYP / 55mA MAX
- Noise Figure 1.1 dB (TYP)
- Out of Band Filter Attenuation 25 dB MIN @ FC +/- 230 MHz
- Weight 4.2 OZ / 9.6 OZ
- Housing VALOX DR-48, 15% Glass / 60% Glass-Filled Nylon

\* (XMRANT-01 /XMRANT-02 respectively)

- Speed Rating** 600 KNOTS TAS @ 55,000 FT. (XMRANT-01)  
210 KNOTS IAS @10,000 FT. (XMRANT-02)

## Testing/Certification

- Hardware - Environmental RTCA DO-160D
- XM Satellite Radio Approved Yes



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