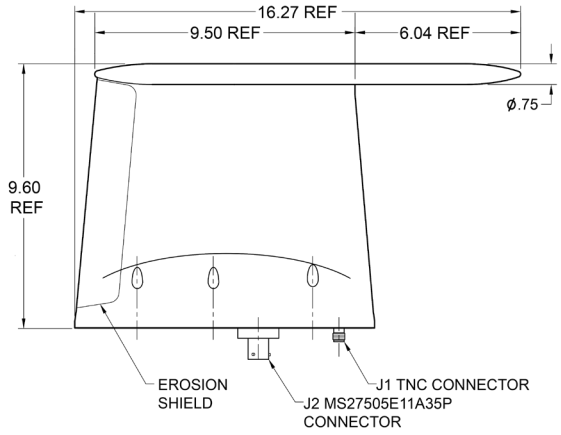
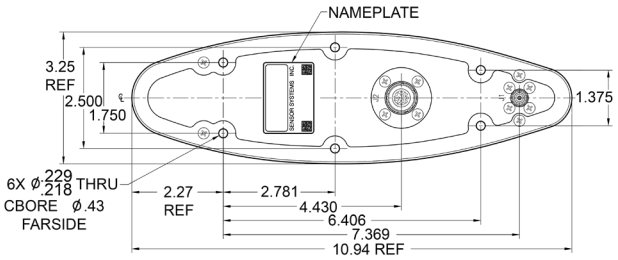
Digitally Tuned VHF/UHF S65-8282-831





Please Note: For REFERENCE ONLY
Contact Sensor Systems for latest drawing

Description
Current state of the art in digitally-tuned antenna technology. This antenna provides high-gain VHF/UHF performance. Frequency tuning in the VHF/UHF band is accomplished by using a solid-state microprocessor technology with switching speeds of less than 50 microseconds and supporting secure frequency-hopping voice communications.

The **S65-8282-831** antenna is tunable from 30 MHz to 88 MHz and has four to ten times more gain in, both transmit and receive, the crucial 30-88 MHz frequency band, than in other comparable passive antennas.

The aerodynamic composite blade of the antenna houses a microprocessor-based logic controller, RF tuning circuitry and DC switching power supply resulting in a single antenna package. Frequency setting information is transmitted directly to the antenna from the radio via a multi-pin connector. Tuning of the inductor circuits is achieved by the logic controller via PIN diodes. The antenna operates on a standard 28 VDC power source. The antenna is ideal for applications with severe mounting concerns.

The **S65-8282-831** antenna is compatible with Rockwell Collins ARC-210, Raytheon ARC-231, and R&S M3AR Series 6000.

Federal & Military Certifications:
MIL-HDBK-5400 and MIL-STD-810.

Specifications

Electrical	
Frequency	30; 40; 50; 60; 70; 80; 88; 108-174 and 225-512 MHz
VSWR	30 MHz: 1.7; 40/50 MHz:1.3; 60 MHz: 1.5; 70/80/88 MHz: 1.9; 108-174 MHz: 2.0; and 225-512 MHz: 1.8
Gain (dBi)	30 MHz: -10; 40 MHz: -8; 50/60 MHz: -7; 70/80/88 MHz: -6, 108-174 MHz: -1 and 225-512 MHz: -1
Polarization	Vertical
Pattern	Omnidirectional in Azimuth Cosinusoidal in Elevation
Impedance	50 Ω
Power Handling	25 Watts; 46 Watts from 225-400 MHz
Primary Power	+28 VDC, 0.8 AMP
Switching Speed	< 50 µS
Mechanical	
Weight	4.0 lbs.
Material	6061-T6 Aluminum Alloy Base / Fiberglass
Finish	Skydrol Resistant Polyurethane Enamel
Connector	RF: J1: TNC Female DC: J2: MS27505E11A35P Male
Environmental	
Temperature (Operating)	-40°C (-40°F) to +90°C (+194°F)
Altitude	70,000 ft.

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