

# Digital VHF/UHF/L-Band S65-8282-843



## DESCRIPTION

**S65-8282-843:** Current state of the art in digitally-tuned antenna technology. This antenna provides high-gain VHF/UHF/L-Band performance. Frequency tuning in the VHF/UHF band is accomplished by using solid-state microprocessor technology with switching speeds of less than 50 microseconds and supporting secure frequency-hopping voice communications. The antenna offers L-Band operation using an independent radiating element via a separate "N" connector.

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. The antenna operates on a standard 28 VDC power source. The antenna is ideal for applications with severe mounting concerns.

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 can be used as a direct replacement for Cobham 12-190-6/1, when used with adapter plate S65-82821465-1. It is compatible with Rockwell Collins ARC-210, Raytheon ARC-231, and R&S M3AR Series 6000.

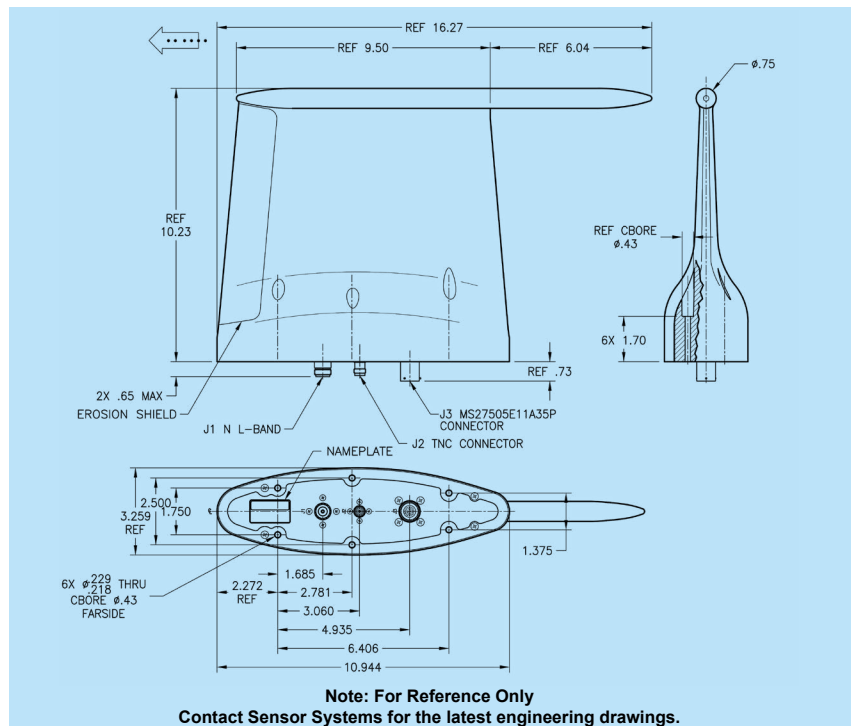
**FEDERAL & MILITARY SPECS:** MIL-HDBK-5400 and MIL-STD-810.

## PERFORMANCE

<b>Freq. (MHz)</b>	30	88	108	174	225	400	512	700-2700
<b>Gain (Avg.)</b>	-10	-6	-1	-1	-1	-1	-1	2.0

## SPECIFICATIONS

ELECTRICAL						
<b>Frequency (VHF/UHF)</b>	30	40/50	60	70/80/88	108-174	225-512
<b>VSWR</b>	1.7	1.3	1.5	1.9	2.0	1.8
<b>Frequency (L-Band)</b>	700-2700 MHz					
<b>Polarization</b>	Vertical					
<b>Pattern</b>	Ominidirectional in Azimuth Cosinusoidal in Elevation					
<b>Impedance</b>	50 Ω					
<b>Power Handling</b>	25 W; 45 W from 225-500 MHz					
<b>Primary Power</b>	+25 VDC, 0.8 AMP					
<b>Switching Speed</b>	< 50 μS					
MECHANICAL						
<b>Weight</b>	5.0 lbs					
<b>Height</b>	10.23 in.					
<b>Length</b>	16.27 in.					
<b>Width</b>	3.259 in					
<b>Material</b>	6061 T6 AL Alloy/Fiberglass					
<b>Finish</b>	Skydrol Resistant Polyurethane Enamel					
<b>L-Band Connector</b>	J1: N Female					
<b>RF Connector</b>	J2: TNC Female					
<b>DC Connector</b>	J3: MS27505E11A35P					
ENVIRONMENTAL						
<b>Temperature</b>	-54°C (-65°F) to +71°C (+160°F)					
<b>Altitude</b>	50,000 ft					
<b>Shock</b>	20 G's					
<b>Side Load</b>	9 PSI					



Note: For Reference Only  
Contact Sensor Systems for the latest engineering drawings.

