

7031 Wideband Active Receive Antenna



KEY FEATURES

- › Wideband, 9 kHz to 30 MHz
- › Low noise floor — maximum sensitivity
- › High 2nd- and 3rd-order IMD intercepts, minimizing spurious signals
- › Small size ideal for limited spaces
- › Rugged and waterproof
- › Receives signals with vertical and horizontal polarization, omnidirectional receive pattern with better than unity gain

The 7031 Active Receive Antenna is an elegantly simple wideband receive-only antenna that is ideal where space is limited and the signal environment is crowded. The 7031 consists of a monopole antenna (125 cm/49 in) mounted directly to a high-dynamic-range, low-noise amplifier.

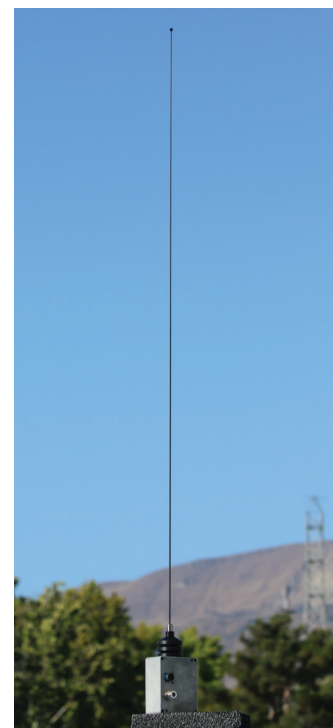
Amplify your ability to separate a signal from the crowd.

The amplifier is the key to the 7031's outstanding performance. The low-noise, low-capacitance, and high-impedance input provides good sensitivity over the entire frequency band. The amplifier's wide linear amplitude range and high 2nd- and 3rd-order IMD intercepts assure spur-free response even in the presence of multiple large-amplitude signals. Overload protection circuitry prevents damage from excessive input.

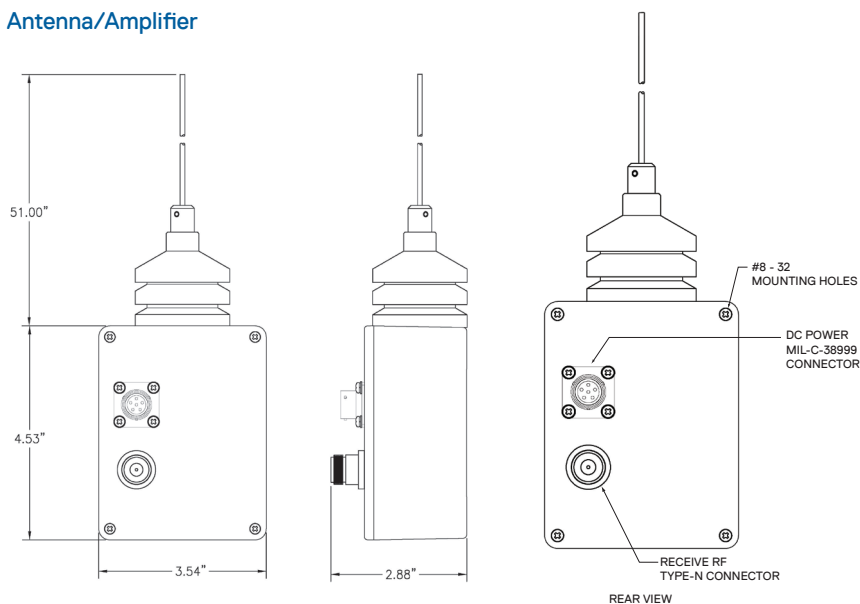
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Model 7031 Specifications

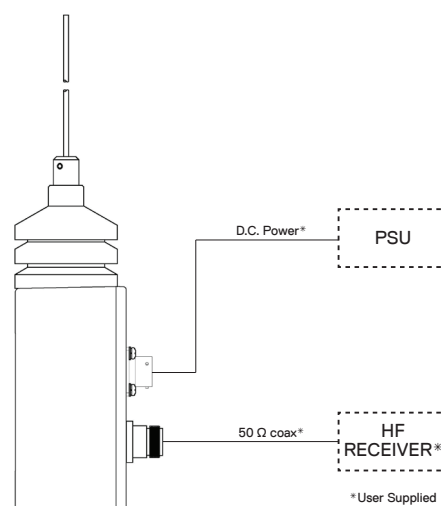
Frequency Range	9 kHz to 30 MHz
Sensitivity	0.1 μ V/m, 1 - 30 MHz (1 Hz bandwidth)
Antenna Factor	Internal high dynamic range unity gain amplifier with IP3 > +30dBm. Provides antenna factor of +12 dB/m over the entire range 1 to 30 MHz
RF Output: Connector	Type N
RF Output: Impedance	50 Ω (2:1 VSWR)
Power	+12 to +15 VDC, 70 mA max (option for +18 to +24VDC)
Power Connector	MIL-C-38999, MS2750810B98P
Weight: Antenna/amplifier	1.6 kg (3.5 lbs)
Interconnecting Cables	50 Ω coaxial cable between antenna/amplifier and customer equipment with Type N connections (not supplied); power cable between power supply and antenna/amp
Environmental	Operating Temp: -25° to +65°C ambient Wind speed: > 150 km/hr



> Antenna/Amplifier



> 7031 Block Diagram



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