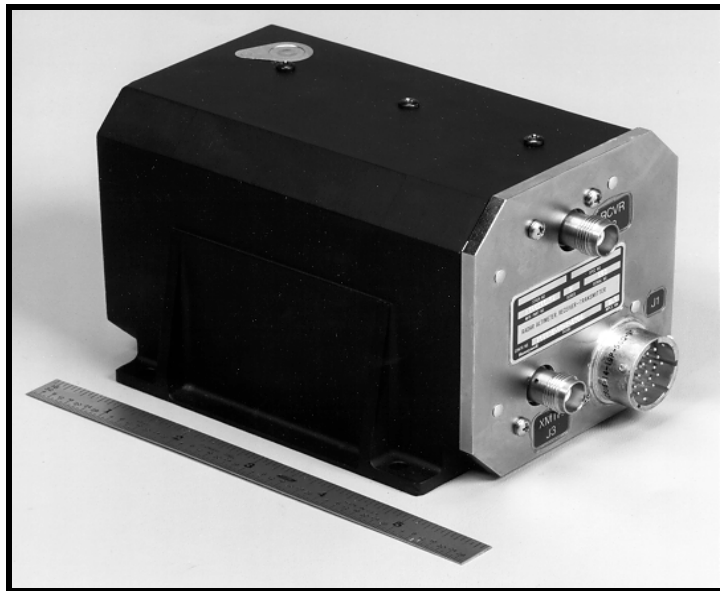


# Honeywell HG8500 Series Radar Altimeter



Specifically designed for the low-cost, high performance tactical requirements of manned and unmanned vehicles, the HG8500 Series is the result of Honeywell's independent development efforts.

Our missile experience (including Harpoon and Cruise Missiles), plus 30 years of leadership in military and commercial aircraft altimetry, enhanced this development program. We have produced more than 90,000 radar altimeters to date, and have capacity to build over 400 per month. The HG8500 is currently in production for remotely piloted vehicles and tactical targets.

## Features

- Low cost
- Automatic calibration and test
- Solid-state design
- Noise immune tracker (ECCM)
- AS-4613 class B part derating
- Low power consumption
- Qualified to Mil-Std-810D, Mil-Std-461C
- Analog and digital output

## System Characteristics

- Pulse radar leading-edge tracking for accurate height indication to the nearest terrain
- All-weather operation including heavy rain or snow
- Predicted MTBF in excess of 5000 hours
- General purpose and low radar cross section antennas
- Height indicators available

## Options

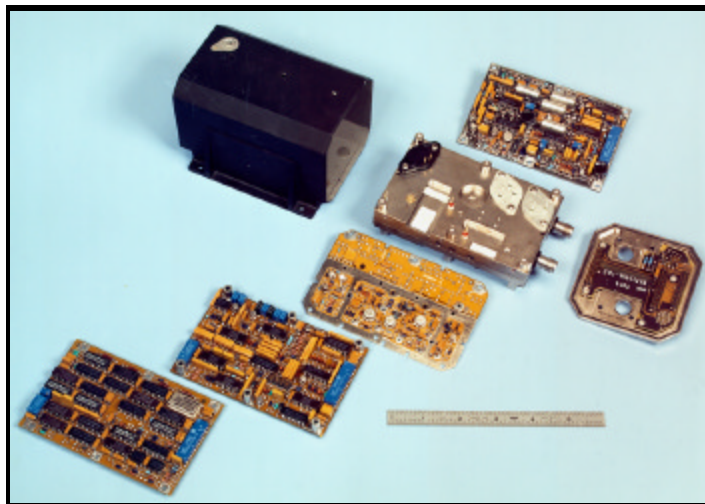
- Analog Rate
- Tailored Altitude Range
- BIT Monitor
- Power Management (Low Detectability)
- Tailored Scale Factors

# HG8500 Series Radar Altimeter

*Presently available in both flat version or conformal to a 4.0 in. radius. Both TNC and SMA connectors available.*

## Specifications

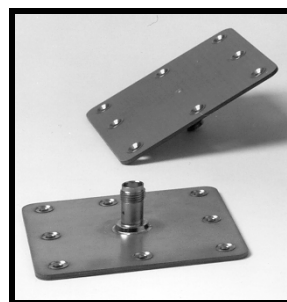
<b>Input Power:</b>	+28±4.0 VDC, 16 W max
<b>Altitude Range:</b>	0 to 8000 ft
<b>Accuracy:</b>	± (3 ft + 3%) Analog ± (3 ft + 1%) Digital
<b>Frequency:</b>	4300 ± 10 MHz
<b>Track Rate:</b>	> 2000 ft/sec
<b>Sensitivity:</b>	126 dB
<b>Analog Output:</b>	0 to -10 VDC
<b>Digital Output:</b>	16-BIT, Serial
<b>Rel Signal:</b>	+ 5.0 VDC (TTL)



<b>Size:</b>	50 in. <sup>3</sup> 3.4 in. (W) x 3.4 in. (H) x 5.6 in. (L)
<b>Weight:</b>	3.0 lb
<b>Transmit Power:</b>	5.0-W peak
<b>Pulse Width:</b>	30/225 ns
<b>PRF:</b>	25 kHz
<b>Qual Status:</b>	Mil-Std-810D Environmental; Mil-Std-461C EMI

## LG81T Microstrip Antennas

<b>Frequency:</b>	4.3 GHz nominal
<b>Impedance:</b>	50 ohms
<b>Polarization:</b>	Linear
<b>Beamwidth:</b>	50 degrees E-plane 50 degrees H-plane
<b>Gain:</b>	9.5 dB
<b>Isolation:</b>	85 dB minimum at 18-in. spacing
<b>Weight:</b>	2.0 oz
<b>Dimension:</b>	3.5 in. x 3.5 in.



## Features

- Significantly reduced installation requirements
- Volume, weight, and production costs significantly lowered
- Minimal structural backing required, structural integrity enhanced
- Qualified on both missiles and aircraft

**Honeywell**

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