



**APPLIED RADAR, Inc.**

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## **AR-CAS-0201**

### **24 GHz High-Resolution Radar (HRR) Sensor**

#### **Summary:**

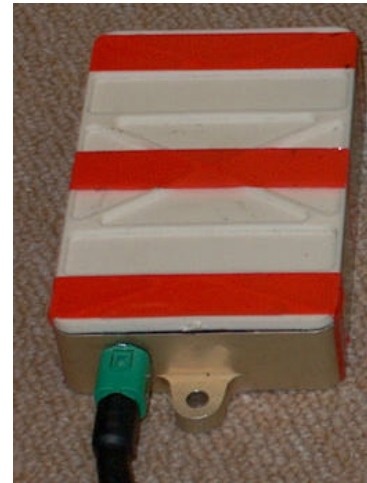
24 GHz High-resolution Radar (HRR) with digital interface. Maximum range is 30 meters, with a range resolution of 12 cm. Beamwidth is 15 degrees x 60 degrees.

#### **Applications:**

Collision-Avoidance Radar  
Robotics  
Obstacle Detection  
Perimeter Security  
Industrial Process Control  
Range/Height Sensing

#### **Radar Specifications:**

RF Frequency:	24.125 GHz (ISM Band)
Range:	30 meters
Range Resolution:	12 centimeters
Vertical Beamwidth:	15 degrees
Horizontal Beamwidth:	60 degrees
Number Beams:	1



#### **Power Supply:**

DC Supply: +9 VDC (40 mA)

#### **Control Inputs:**

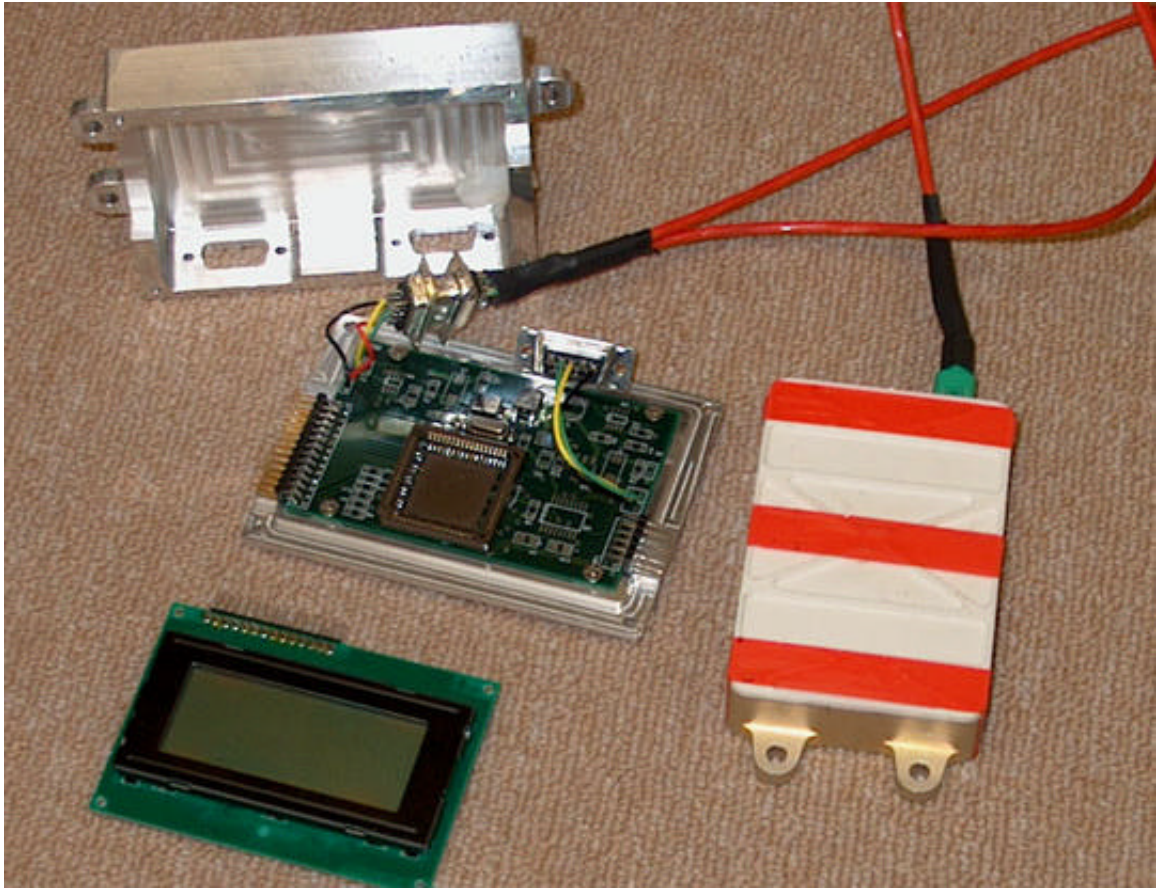
Radar control and data I/O is via a digital CAN interface.

#### **Outputs:**

CAN data. Interfaces with AR-CAS-0210 processor.

#### **Mechanical Dimensions:**

Size:	12cm x 6.3cm x 2.2 cm
Weight:	130 grams (< 1 lb).



**Figure 1:** Photo of HRR radar AR-CAS-0101 connected to engineering prototype of Processor Control Unit (PCU) AR-CAS-0210. HRR sensor measures 12cm x 6.3cm x 2.2 cm and weighs 130 grams.



**Figure 2** Photo of HRR sensor attached to mock automobile bumper for vehicular collision-avoidance testing.