



**HOUSTON
RADAR**

SS300 OEM Doppler Speed Radar

Houston Radar's SS300 Doppler sign activation/speed sensor/Doppler Radar is a state of the art **milli-power** Digital Signal Processing (DSP) based K-band radar for the sign activation and traffic calming markets. It is the premier product in its class available in the world.

Features and Benefits

- World's smallest and lowest power usage OEM K-Band Doppler radar at 0.10 Watts, 6X lower than our DR500S radar and up to 25X lower than some other industry offerings
- 300+ feet (90+m) typical pickup range for a compact vehicle
- FCC pre-approved with CE mark
- Fully configurable via RS232 serial port for all settings
- Simple rotary switch or thumbwheel input possible to set threshold
- Wide input operating range allows solar operation
- 1.75Wx1.65Hx0.5D in (44x42x12 mm) open frame ultra-thin profile
- 1.9Wx2.1Hx0.9D in (4.5x4.8x2.4 cm) weatherproof enclosure option
- Firmware "boot loader" allows for field upgrading of firmware
- Two LED Lamp outputs to drive 1.8W LED lamps with dimming
- One photo sensor input to sense ambient light to dim LED lamps
- 100% self-test feature built-in including self power usage
- IO expansion board w/ DB9 connector, rotary s/w and isolated high power output available

Pin #	Function
1 (Triangle Mark)	GND
2	Do not connect
3	Reserved. Do not connect
4	Reserved. Do not connect
5	Reserved. Do not connect
6	Reserved. Do not connect
7	Trigger "open drain" output # 1
8	Trigger "open drain" output # 2
9	RS232 Transmit from radar
10	RS232 Receive into radar
11	VCC
12	GND



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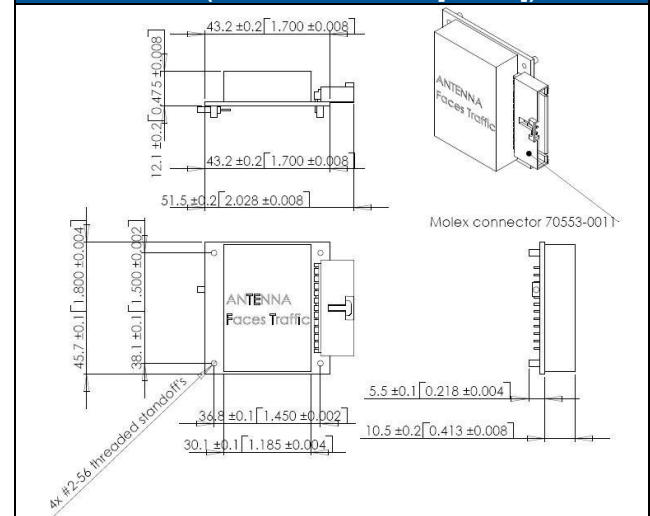
Open Frame SS300



Weatherproof SS300

Specifications & Recommended Operating Conditions	
Specification	Recommended Condition
Vcc	5.0V to 18VDC (21V max)
Icc@12VDC	9 mA (0.1 Watts)
Radar RF out	5 mW maximum
Radar f _{center}	24.125GHz or 24.200 GHz
Operating °F (°C)	-40 (-40) min to 185 (85) max
Pickup Distance	300+ feet (90+ m) in most cases
Beam Angle	38°x45°
Beam Polarization	Linear
Lamp 1 & 2 out	135 mA max each up to 60VDC
Lamp dimming	240 Hz PWM from 5 to 100 %
LDR light input	0 to 3.3V input
FCC ID	TIASS300
CE Mark	Yes
Dimensions	Open frame 1.75Wx1.7Hx0.5D" (44x42x12 mm)
	Boxed 1.9Wx2.1Hx0.9D" (4.5x4.8x2.4cm)
Weight	0.05Kg (0.1 lbs) approx

Outline Details (dimensions in mm [inches])



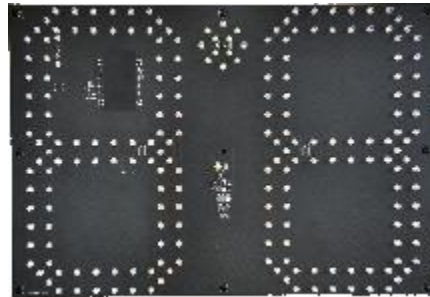
Example Applications of SS300 Radar

Example of a simple ultra low power radar activated flasher powered by SS300 radar. Add battery and solar panel with charge controller to make complete sign.



The SS300 is at the heart of our 'PNL10' ultra low power and highly integrated speed calming kit.

Use our kit or design your own VATCS face and allow SS300 radar to drive your shift registers via its 'SPI' port for high integration, efficiency and cost savings.



Optional IO Connection Board for SS300 Radar

- Easily connect field wiring to all SS300 IO connections
- High power isolated AC/DC solid state relay to drive external loads or high power MOSFET to drive PWM loads up to 60Watts
- Rotary switch directly sets low, high cutoff speeds and violator speed via innovative ganging method
- DB9 port for direct computer or Bluetooth connection
- Complete bill of materials and Gerbers available to SS300 customers to make it yourself and save money



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All specifications are subject to change. Pickup distance is typical and will vary with road conditions and targets.