



SS400 OEM Doppler Speed Radar

Houston Radar's SS400 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

- Small, low power usage OEM K-Band Doppler radar at 0.054 Watts, 11X lower than our DR500S radar and up to 40X lower than some other industry offerings
- 300+ feet (90+m) typical pickup range for a compact vehicle
- FCC, Industry Canada (IC) 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
- Advanced ground speed tracking to mount on moving vehicle
- Ultra-small open frame and weatherproof enclosure options
- 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



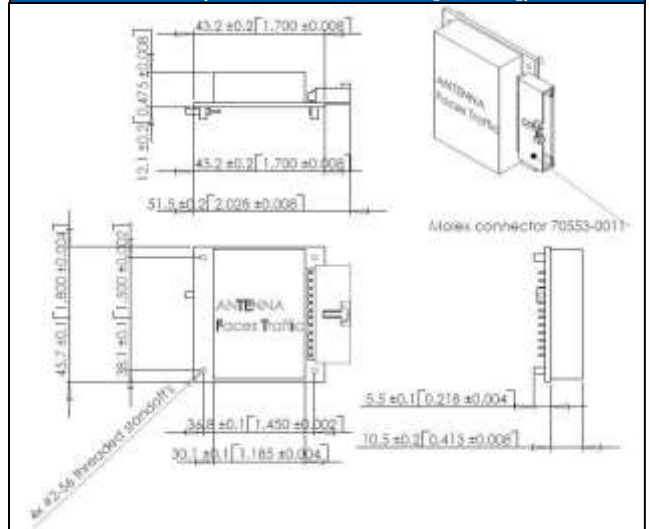
Open Frame SS400



Weatherproof SS400

Specifications & Recommended Operating Conditions	
Specification	Recommended Condition
Vcc	6.0V to 18VDC
Icc@12VDC	4.5 mA (0.054 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	180 Hz PWM from 5 to 100 %
LDR light input	0 to 3.3V input
FCC ID	UXS-IPS154US
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 SS400 Radar

Example of a simple ultra low power radar activated flasher powered by SS400 radar. Add battery and solar panel with charge controller to make complete sign.



The SS400 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 SS400 radar to drive your shift registers via its 'SPI' port for high integration, efficiency and cost savings.



Optional IO Connection Board for SS400 Radar

- Easily connect field wiring to all SS400 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 SS400 customers to make it yourself and save money



**HOUSTON
RADAR**

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