

Delta DRS1000 Non-contact Speed Sensor Specifications

Output

- 0 to 5 V square wave, differential or single ended
- 62.1 pulses for every kilometer per hour of speed measured
- 100 pulses for every mile per hour of speed measured

Speed Range

- 0.8 km/h to 480 km/h
- 0.5 mph to 300 mph

Temperature Range

- -17 to 60° C
- 0 to 140° F

Total Unadjusted Error

- $\pm 0.34\%$ at 1 km/h*

*Error increases 0.0014% for every 1 km/h increase in speed. For example, at 2 km/h, the error increases to ± 0.003414 . At 100 km/h, the accuracy is $\pm 0.48\%$

- $\pm 0.34\%$ at 1 mph*

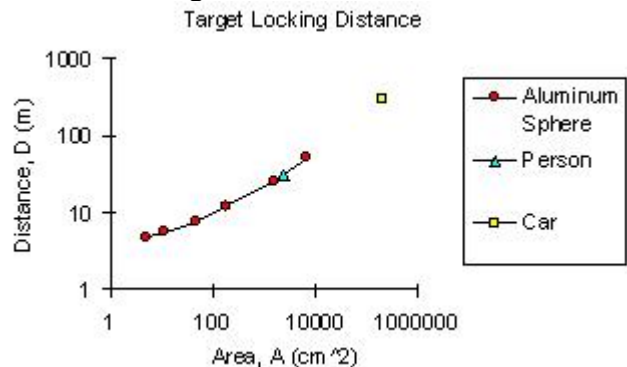
*Error increases 0.0023% for every 1 mph increase in speed. For example, at 2 mph, the error increases to $\pm 0.3423\%$. At 60 mph, the accuracy is $\pm 0.48\%$.

Overall accuracy of the speed measurement is also influenced by external factors which may include sensor alignment, vibration, clutter, etc.

Wiring

- Red = + power; Black = - power
- Green = + signal; White = - signal

Maximum Target Distance



Maximum target distance is determined by the size and shape of the target. The sensor can see a normal size car at about 300 meters (1000 feet)

Microwave Characteristics

- Frequency: Ka Band (35.4 ± 0.1 GHz)
- Beam Divergence Angle: 6° from center
- Average RF Power: 0.02 W maximum
- Effective Radiated Power: 0.98 W

Sensor Response

- Update Period: 0.01 seconds
- Locking Latency: 0.02 seconds
- Unlocking Latency: 0.05 seconds
- Sensor Time Constant: 0.025 seconds

Enclosure

- Weather Resistant

Power Supply

- 10.5 to 16.4 VDC, 2.4 W

Weight

- 230g (0.5 lbs.)



GMH Engineering

336 Mountain Way Dr, Orem, UT 84058
(801) 225-8970 www.gmheng.com

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