



RADAR III GROUND SPEED SENSOR

The Radar III is the most accurate ground speed sensor in the market.

This third generation ground speed sensor delivers the truest velocity measurement available.

1/3 the size of the Radar II
with no sacrifice in performance

Small, compact design

Easy to install

Views actual ground surface for accurate speed measurement

Can be mounted to look forward or backward from vehicle

Backed by the Power of DICKEY-john

When you buy the Radar III, you get dependability and reliability you expect from DICKEY-john.

DICKEY-john's advanced technology and superior electronics are backed by a team of expert, in-house mechanical, electrical, software, and test engineers.



DICKEY-john®
CORPORATION

Revolutionizing Electronics

5200 DICKEY-john Road
Auburn, IL 62615
217-438-3371
217-438-6012

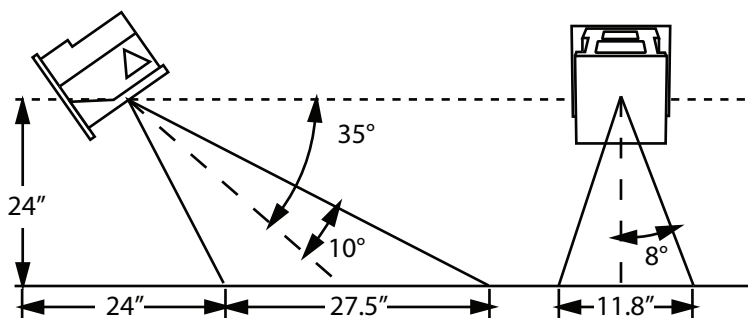
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RADAR III GROUND SPEED SENSOR



SPECIFICATIONS

Velocity Range	.53 - 107.8 km/h (.33 - 67 mph) for 44 Hz/mph output frequency .42 - 107.8 km/h (.26-67 mph) for 59 Hz/mph output frequency	Signal Output Filter Options	Slow/Fast combo Slow (nominal .250 sec.) Fast (nominal .060 sec.) Superfast (nominal .014 sec.)
Accuracy	True Velocity errors of: $\leq \pm 3\%$.53 - 3.2 km/h (.33 - 2 mph) $\leq \pm 1\%$ 3.2 - 70.8 km/h (2-67 mph) (Based on in-field system calibration)	Output Stage Characteristics	Transient/short protected NPN transistor Z_{OH} (High level output source impedance) Z_{OL} (Low level output sink impedance) $Z_{OH} \sim 1051$ ohms $Z_{OL} \sim 63$ ohms
Response, Output Speed	≤ 200 milliseconds lag for combo filter selection ($dv/dt = 6.4$ km/h/sec (4.4 mph/sec))	Microwave Frequency	24.125 GHz $\pm$ 50 MHz except U.K. which is 24.300 GHz
Turn ON/OFF Delay	≤ 305 mm (12 inches) distance traversed, typical	Microwave Power Level	5mw, nominal
Footprint, Target	Elliptical, 368 mm (14.5 inches) minor axis by 546 mm (21.5 inches) major axis {at 601mm (24 inches) mounting height}	Overall Size	103 x 86 x 79 mm (4 x 3.4 x 3.1 inches)
Mounting Angle	$35 \pm 5^\circ$ depressed from horizontal (from target surface)	Weight	.5 kg (1 lbs)
Mounting Height	457 - 1219 mm (18-48 inches) 610 mm (24 inches) nominal (from target surface)	Environmental Compliance	EN ISO 14982 ASAE EP-455 Product is immuned to reverse polarity, EMI, and electrical transients such as load dump, alternator field decay, inductive load switching, etc. Operating temperature: -40° to $+85^\circ$ C. Environmentally durable, i.e., not affected by chemicals, dust, salt spray, rain and wash. Operational vibration limits with isolation mounts 0.75 g from 200Hz - 350Hz, 3 g from 351Hz - 2000Hz.
DC Power Requirements	+VB (Unregulated battery voltage) $<+9$ to 16 VDC @ $\leq .6$ Amp [18 to 32 VDC @ $\leq .6$ Amp]	Connector	Many options are available. The standard +12V unit is as follows: Amp 206429-1 (Mating Connector AMP 206430-2) Pin 1 Ground - Black Pin 2 Signal Out - Green 0 - 12 VDC Symmetrical Squarewave Pin 3 +12 VDC - Red Pin 4 Radar Presence Note: Pin 3 and Pin 4 are jumpered at the connector.
Output Signal Characteristics	V_{OH} (High level output signal voltage in VDC) V_{OL} (Low level output signal voltage in VDC) I_{OH} (High level output source current in ma) I_{OL} (Low level output sink current in ma) $V_{OH} \approx (+VB - 1.5 \text{ VDC}) - 1.051 (I_{OH})$ $V_{OL} \leq .7 \text{ VDC @ } I_{OL} \leq 6 \text{ ma}$ [$V_{OH} \approx (12.8 \pm 1.0 \text{ VDC}) - 1.051 (I_{OH})$ $V_{OL} \leq 1.0 \text{ VDC @ } I_{OL} \leq 6 \text{ ma}$]		
Output Frequency	Factory selectable options: 36.60 Hz/Km/h (59 Hz/mph) 27.45 Hz/Km/h (44 Hz/mph) 17.20 Hz/Km/h (27.62 Hz/mph) 10.25 Hz/Km/h (17.034 Hz/mph)		Approvals: e-mark certification # e24_021030 Industry Canada cert. # 5682A-RVSIII FCCID: 57H8LRDJRVSIII



Note: $\leq$ means less than or equal to.