

CARSENSE 303

MAGNETORESISTIVE VEHICLE DETECTOR

Applications

The CarSense™ 303 features advanced 3-axis, magnetoresistive sensing technology. The sensor measures Earth's magnetic field and responds to disturbances caused by ferrous objects. The CS303 combines this exciting new technology with a field-proven hardware platform to produce a high-sensitivity, compact, and cost-effective solution for reliable vehicle detection. Three sensing elements provide magnetic field measurement in the X, Y and Z axes, improving detection sensitivity.

- Three-dimensional presence detection of vehicles
- Select X, Y and/or Z axis independently
- Stand-alone sensor
- Sensor stores ambient background and settings in non-volatile memory
- Remote control module for programming and additional relay contact output
- Fast response for high-speed detection
- Easy, low-cost installation
- **NEW...DETECT-ON-STOP™** or (DOS®) feature will allow detection only when a vehicle has come to a complete stop on the loop. This is a worldwide unique feature to EMX detectors. It is a major advantage if you want to ignore cross traffic in tight spaces.

In contrast to the multiple cuts and corner reliefs required for the installation of inductive loops, the small size of the detector allows for easy installation in pavement (below grade) with straight saw cut resulting in cost savings on labor and materials. The rugged sensor is also suitable for above grade installations, making it ideal for use in confined areas or hidden in non-ferrous architectural components for security purposes.

CS303



EMX

INDUSTRIES

EMX Industries, Inc.

4564 Johnston Parkway, Cleveland, Ohio 44128

P. 800 426 9912 F. 216 518 9884

Sales Inquiries: salesupport@emxinc.com **Technical Support:** technical@emxinc.com

www.emxinc.com

APPLICATIONS

- Boom gate control
- Drive-thru and car wash vehicle detection
- Truck/lorry detection at loading docks
- Vehicle counting in car park and toll booths
- Truck and tow-motor detection for industrial gates and doors



CS303-C-1



CS303-DB-50

Technical Data

Sensing technology

Sensitivity

Axis sensitivity

Environmental tracking

Local magnetic field nulling

Detection range

Power/fault indicator

Detect indicator

Pulse/presence

Detect-On-Stop

Outputs

Output ratings

Connection

Operating environment

Housing

Environmental rating

Power supply

Current draw

Supply protection circuitry

Dimensions

Weight

Control Unit

Control Unit & Sensor

Sensor

		3-axis magnetoresistive	
		10 levels: 0-9	
		512 counts/gauss (typical)	
		Automatic compensation	
		Averages local field signature in any sensor orientation	
		1.5m (5ft.)	
	Green LED		
	Red LED		
		Allows the relay/NPN output to send either a pulse output or have constant presence	
		Requires vehicle to stop for a minimum of 1 second (1-2s typical)	
	SPDT relay NPN (open collector)		NPN (open collector)
	Relay: 1A @ 24VDC...120VAC NPN: 50 mA (max)		50 mA
	10 position screw terminal		5 conductor direct burial
		-40° C...82° C (-40° F...180° F) 0...95% relative humidity	
		PVC	
	IP30		IP69K
	12-30 VDC and 24 VAC		12-30 VDC
	40 mA max		10 mA max
		Reverse polarity and fuse protected	
	76mm (3.0") x 22mm(0.9") x 70mm(2.75")		102mm (4.0") x 27mm (1.0")
	68g (0.15 lbs.)		43g (0.09lbs.)

Ordering Information

- CS303-C-1 Control Unit
- CS303-DB-50 Direct Burial Sensor

WARRANTY EMX INC. the product described herein for a period of 2 years under normal use and service from the date of sale to our customer. The product will be free from defects in material and workmanship. This warranty does not cover ordinary wear and tear, abuse, misuse, overloading, altered products, or damage caused by the purchaser from incorrect connections, or lightning damage. There is no warranty of merchantability. There are no warranties expressed, implied or any affirmation of fact or representation which extend beyond the description set forth herein. EMX Inc. sole responsibility and liability, and purchaser's exclusive remedy shall be limited to the repair or replacement at EMX's option of a part or parts not so conforming to the warranty. In no event shall EMX Inc. be liable for damages of any nature, including incidental or consequential damages, including but, not limited to any damages resulting from non-conformity defect in material or workmanship. Rev 1.2 06/04/15

