M-GAGE™

The Most Reliable Vehicle Detection Sensors on the Road

Quick and easy-to-install solution for greater accuracy, repeatability and durability

An innovative solution for most vehicle sensing applications

▸ Vehicle detection in a car wash
▸ Truck detection at loading dock
▸ Car detection in drive-thru
▸ Vehicle counting in tollbooths
▸ Automatic overhead door and gate actuation
▸ Traffic monitoring in turn lanes and bridge decks
▸ Vehicle incursion

A cost-effective replacement for unreliable inductive loops

▸ Replaces cumbersome, failure-prone inductive loops with performance equal to or better than a 6' diameter loop
▸ Easily installs above or below grade (up to 18")
▸ Installs in a fraction of time needed to repair or replace failed loops; wires into existing controls
▸ Features completely self-contained design with no external controller
▸ Allows reliable activation in unstable soil and substrates
▸ Provides a robust, low-cost alternative to video detection systems—operates 24/7, in all weather, without illumination or additional infrastructure
▸ Rated to IP69K; NEMA 6P, depending on model

Advanced Monitor Software

▸ Shows threshold adjustment
▸ Provides real-time information display through a PC

Sensors for reliable detection of stationary or moving vehicles

▸ Reliably detects large metal objects, such as cars, trucks, production vehicles and railcars, even when they aren't moving
▸ Allows for detection of small vehicles, such as motorcycles, wheelchairs, steel bicycles and golf carts
▸ Learns ambient background and stores setting

▸ Monitors magnetic flux changes when metal (ferrous) objects are introduced
▸ Works with PLCs or existing amplifiers and timer cards
▸ Encapsulated in rugged epoxy to prevent moisture penetration
▸ Offers power supply and relay interface options

M-GAGE™ Series: S18M

• 18 mm barrel design that can be surface mounted or easily passed through non-metallic conduit; ideal for new installations
• Integral push button or remote line for simple programming
• Rugged ABS/polycarbonate housing

M-GAGE™ Series: Q7M

• Flat-Pak design—only 77.0 x 19.0 x 7.5 mm
• Narrow housing for surface mounting or 1/4" (road surface) saw cut
• Rugged epoxy-encapsulated, anodized aluminum housing with thermoplastic end caps

www.bannerengineering.com

1.888.373.6767

bannerengineering.com

BANNER®
more sensors, more solutions

*Patents pending

M-GAGE ™ Vehicle Detection Sensors

S18M Models, 10-30V dc

66.8 mm

ø 18.0 mm

Model	Cable*	Cable Type	Output Type	Data Sheet
S18MB	2 m (6.5')	5-conductor cable	Bipolar NPN/PNP**	114430
S18MB W/*	5 m (15'), 9 m (30'), 15 m (50'), 30 m (100') or 60 m (200') cable lengths also available			

* For 15', 30', 50', 100' or 200' length cables, add length **W/(length)** to the model number (example, **S18MB W/30** for 30' cable). For a 5-pin Euro-style QD, add suffix **Q** to the 6.5' model number (example, **S18MBQ**). A model with a QD requires mating cordset. See product data sheet for more information.
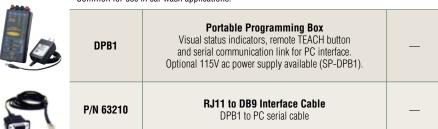
** Consult with factory for other options.

77.0 mm — **7.5 mm**

19.0 mm

Q7M Flat-Pak Models, 10-30V dc

Model	Cable*	Cable Type	Output Type	Data Sheet
Q7MB	2 m (6.5')	26 gage/5-wire shielded cable with 4.1 mm diameter polyethylene jacket	Bipolar NPN/PNP**	117172
Q7MB W/*	5 m (15'), 9 m (30'), 15 m (50'), 30 m (100') or 60 m (200') cable lengths also available			

* For 15', 30', 50', 100' or 200' length cables, add length **W/(length)** to the model number (example, **Q7MB W/30** for 30' cable). For a 5-pin Euro-style pigtail QD, add suffix **Q** to the 6.5' model number (example, **Q7MBQ**). A model with a QD requires mating cordset. See product data sheet for more information.

** Consult with factory for other options.

Power Supplies and Interface Modules for use in Control Cabinets

Model	Description	Sensor Input	Input Voltage	Data Sheet
PS24-1N*	**Power Supply** e/m relay output, status lights, and TEACH button	NPN	24V ac	123566
PS24-1P*		PNP		
PS115-1N		NPN	115V ac	
PS115-1P		PNP		
SIM-525T	**Passive Interface Module** Visual status indicators, permanent remote TEACH access and direct link to communication line	—		123240
DPB1	**Portable Programming Box** Visual status indicators, remote TEACH button and serial communication link for PC interface. Optional 115V ac power supply available (SP-DPB1).			—
P/N 63210	**RJ11 to DB9 Interface Cable** DPB1 to PC serial cable			—

* Common for use in car wash applications.

DX80 Wireless M-GAGE™ Node for Vehicle Detection

SureCross™ M-GAGE sensor with integrated wireless connectivity and battery life up to 10 years.

Contact factory or go online for details.

iKnow sensors™ Online Training & Tutorials

A complete resource for tutorials, product questions & answers—and the mechanics & theory behind sensor technology available online at
www.bannerengineering.com

Q: What is the range of the M-GAGE?

Q: How deep can I bury the sensor?

Q: Can I reliably see 2 lanes at once?

Q: What is the smallest vehicle the sensor will detect?

Go online for answers to these M-GAGE questions or to pose your own!

Quick-Disconnect (QD) Cordsets

Style	Model	Length
5-pin Euro-Style straight, with shield	**MQDEC2-506**	2 m
	MQDEC2-515	5 m
	MQDEC2-530	9 m
5-pin Euro-Style right-angle, with shield	**MQDEC2-506RA**	2 m
	MQDEC2-515RA	5 m
	MQDEC2-530RA	9 m

NOTE: Take advantage of the full capabilities of the M-GAGE by using the following items:
- Advance Monitor Software
- DPB1 Portable Demo Box with SP-DPB1 115V ac power supply/battery eliminator
- DPB1 to PC interface cable

MORE INFO ONLINE *www.bannerengineering.com*

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