RFID Sensor Systems

Sensing, Tracking, and Data Logging

S005 Vehicle monitoring system for toll gates, parking lot gates, and loading docks

RFID Sensor Systems offers tags, readers, and small systems compliant with EPC Gen2 class 1 international standard. We offer a variety of tags with different mounts and read/write range. Our product line is further enhanced with EPC Gen2 class1 compatible tags providing immediate sensor data and logged sensor data. Most of our tags are available with adhesive backing, Velcro-like backing, magnetic strip backing, and screw-hole mounting options. Our passive tags include industry standard CMOS Gen2 class1 integrated circuit ICs. Our Gen2 sensor tags include in-house proprietary CMOS designs. The RFID sensor tags provide excellent range under both metal mount and long range conditions.

RFID Sensor Systems is a specialist RFID supplier of Gen2 components and small systems. We invite special inquiries for further customized deliveries.

Vehicle windshield tag

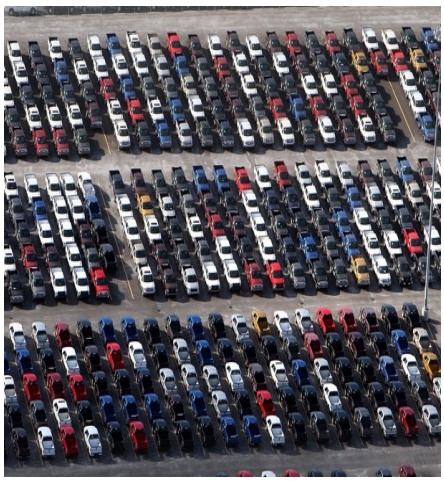
Readout for small trucking fleets

Stationary reader

The RFID Sensor Systems ultra long range metal mount tags are ideally suited for mounting on the window, on the front dash panel, or mounted anywhere on the body of vehicles for the purpose of identification backed up with a file of vehicle history. The S005 system uses passive RFID tags which are much more economical compared with the active tags in common use around the world for toll collections and vehicle ID.

Tollway

Trucking fleets



Vehicles at supply depot

The tag used in the S005 system provides a read range up to 400% greater than industry available tags independent of open air or mounting on metal. This tag has a longer read range compared to any other passive tag we have found on the market. This tag for the first time permits an effective, highly reliable read rate of 99.9% for toll road gating interrogators for vehicles moving along the toll lane through a toll gate at speeds up to 80mph. Typical read rates are often hundreds per second. This read reliability matches that obtained with active, battery-based tags priced much higher compared the RFID Sensor Systems tag.

The S005 vehicle monitoring system can be synchronized with high speed photography to provide a visual record of any selected vehicle. The system can be programmed to require a 64-bit electronic security code for applications where this level of security is necessary.

The RFID Sensor system uses interrogators that operate under the international protocol EPC Gen2 class1 / ISO 18000 6c standards. The proprietary tags in our system may be programmed for readout using RFID Sensor Systems interrogator I001, I002, I003, and I004 as well as with dozens of other industry readers.

The S005 RFID-vehicle tracking system Summary Specification

Features	
Tag Dimensions:	T050 - 5.5 x 0.70 x 0.5 in. (11.43 x 1.77 x 1.3 cm) before special backing
	T070 - 6.5 x 0.75 x 1.85in. (16.5 x 1.9 x 4.7 cm) before special backing
Standards compatible:	EPC Gen2 Class1/ISO 18000-6c
Frequency:	902 - 928 NA + SA, 865.7- 867.6 EU, 865 - 867 India, 902-907.5 Brazil, 920-926 MHz
	Australia
Tag Read Range:	Typically up to 400% greater compared with popular passive RFID industry tags
Memory 800 bits total:	512 user bits + 96 bit EPC code + 64 bit unique TID + 32 bit access password + 32 bit
	kill password. Preprogrammed with unalterable 64-bit serial number.
Ambient temperature:	-58 to 185 °F (-50 to +85°C)
Hermeticity:	IP-67
Standard tag colors:	Black and ivory
Attachment:	Adhesive backing, Velcro-like backing, magnetic backing and screw holes
Tag Visual label:	Customized labeling available with assigned numbering

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