



## **IDentity External License Plate Transponder**

Ultra High Frequency 865 - 928 MHz  
Global Passive Transponder

### **Overview**

The IDentity External License Plate Tag is a high performance radio frequency (RF) transponder designed to be used in conjunction with Sirit's IDentity 5000 series reader systems for automatic vehicle identification applications.

Each transponder is capable of read/write functionality, contains a unique identification code, and is powered by utilizing energy from the reader, eliminating the requirement for a battery. The External License Plate transponder provides a robust form factor designed to withstand harsh environmental exposure and for mounting on the license plate of the vehicle without obscuring the view of the license plate.

The IDentity series tag and reader solution is ideally suited for a number of global transportation applications including Electronic Vehicle Registration (EVR), vehicle emissions testing, proof of insurance compliance and electronic tolling. By eliminating the manual, visual-based inspection associated with current systems the Sirit solution enables system operators to securely identify vehicles with appropriate authorizations from a distance, while the vehicle is in motion.

### **Security & Authentication**

Sirit's "Secure Reader" and "Secure Tag" technologies offer multiple levels of security and authentication options. These options provide physical authentication techniques for the external license plate transponder. In addition, Sirit provides "RF" security features that verify the authenticity of a transponder during communications with the reader and provide security of sensitive information that may be stored on the tag.

These security and authentication features have been successfully tested at vehicle speeds up to 140 MPH (225 KPH).

# Identity External License Plate Tag

## 865 - 928 MHz Global, Passive Transponder



Performance Characteristics	
Operating Frequency:	902 - 928 MHz Americas, 4 W EIRP 869.4 - 869.56 MHz Europe, 0.5 W ERP 865.6 - 867.6 MHz Europe, 2 W ERP
Supported Protocol:	ISO 18000-6C
Data Transfer Rate:	Up to 640 kbps
Physical Characteristics	
Dimensions (LxWxD):	209.5 x 42.67 x 27.94 mm (8.25 x 1.68 x 1.10 in.)
Weight:	75.8 g (2.67 oz)
Environment	
ESD Voltage Immunity:	+/- 3kV
Operating Temperature:	-40°C to +85°C (-40°F to 185°F)
Storage Temperature:	-40°C to +100°C (-40°F to 212°F)
Relative Humidity:	100% condensing
Tag Memory & Security	
Tag Part Numbers	ID-ELP-L1S                      ID-ELP-L3S
On-Chip Memory:	752 bits                              800 bits
Tag Identifier:	64 bits                                64 bits
Access password:	32 bits                                32 bits
Kill password:	32 bits                                32 bits
EEPROM data retention:	10 years                              10 years
EEPROM write endurance:	10,000 cycles                      10,000 cycles
Unique TID	Yes                                      Yes
Password Authentication	Yes                                      Yes
Read Lockable Memory	No                                        Yes



Identity External License Plate Transponder

SIRIT - CANADA  
372 Bay Street, Suite 1100  
Toronto, Ontario M5H 2W9 Canada  
Tel: 416.367.1897  
Fax: 416.367.1435

SIRIT - USA  
1321 Valwood Parkway, Suite 620  
Carrollton, Texas 75006 USA  
Tel: 972.243.7208  
Fax: 972.243.8034

901 Lane Avenue, Suite 100  
Chula Vista, California 91914 USA  
Tel: 619.656.2515  
Fax: 619.872-0662

For more information,  
contact sales toll free  
at 1.866.338.9586

E-mail: [sales@sirit.com](mailto:sales@sirit.com)



### About Sirit

Sirit Inc. (TSX: SI) is a leading provider of Radio Frequency Identification (RFID) reader technology to OEMs and solution providers worldwide. Harnessing the power of Sirit's enabling-RFID technology, customers are able to more rapidly bring high quality RFID solutions to the market with reduced initial engineering costs. Sirit's products are built on more than 16 years of RF domain expertise addressing multiple frequencies (LF/HF/UHF), multiple protocols and are compliant with global standards. Sirit's broad portfolio of products and capabilities are easily customized to address new and traditional RFID market applications including Supply Chain & Logistics, Cashless Payment, Access Control, Automatic Vehicle Identification, Inventory Control & Management, Asset Tracking and Product Authentication. For more information, visit [www.sirit.com](http://www.sirit.com).



The "RFID by Sirit" symbol signifies that Sirit Inc.'s high quality RFID reader technology resides within this product.

© 2009 Sirit Inc., all rights reserved. "Sirit", the Sirit Design, "RFID by Sirit", the RFID by Sirit Design and "vision beyond sight" are all trademarks of Sirit Inc. All other trademarks are the property of their respective owners. Specifications subject to change without notice.