



IDentity Card Tag

Ultra High Frequency 865 - 928 MHz
Global Passive Transponder

Overview

The IDentity Card 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 card transponder has a compact form factor so as not to hinder the driver's view, while offering the ability to transfer the tag between vehicles.

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 authentication techniques for the credit card 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 Card Tag

865 - 928 MHz Global, Passive Transponders



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

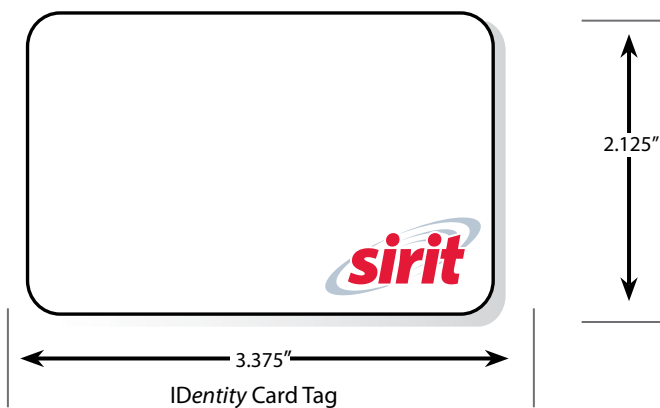
Dimensions (LxW):	85.72 x 53.97 mm (3.375 x 2.125 in.)
Weight:	5.0 g (0.176 oz)

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:	30% - 70%

Tag Memory & Security

Tag Part Numbers	ID-CCT-L1S
On-Chip Memory:	752 bits
Tag Identifier:	64 bits
Access password:	32 bits
Kill password:	32 bits
EEPROM data retention:	10 years
EEPROM write endurance:	10,000 cycles
Unique TID	Yes
Password Authentication	Yes
Read Lockable Memory	No



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

www.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.



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.

DS-0063