



## IDentity EVR Transponders

Ultra High Frequency 865 - 928 MHz  
Transponder for Electronic Vehicle Registration

### FEATURES

- Batteryless operation  
Transponder is powered by the antenna
- XXXX  
Transponder is powered by the antenna
- Worldwide compliance in windshield mount format

### Overview

The IDentity EVR transponder is a small radio frequency (RF) device designed for Sirit's Electronic Vehicle Registration system. Each transponder contains a unique identification code and utilizes energy from the antenna for power, eliminating the requirement for a battery. The windshield mount form factor is small and convenient eliminating tedious lineups and delays associated with unautomated systems.

### How It Works

Sirit's IDentity EVR transponder uses RF backscatter modulation technology to respond to signals emitted by an IDentity EVR reader by reflecting and modulating the reader's RF signal. As a card approaches the read zone, the presence of an RF field "wakes" the transponder. Once activated, the transponder returns a pre-programmed code to the reader system through the IDentity EVR antenna.

The IDentity EVR transponder's wireless link uses comprehensive error detection methods to ensure a high accuracy rate even under the most adverse environmental conditions. Error detection and correction also ensures information is transferred accurately between the transponder and reader. This read range can be configured by the IDentity EVR reader to a maximum distance of 26.2 metres.



# Identity EVR Transponders

## 865 - 928 MHz Global, Batteryless 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
Working Range:	Determined by reader & antenna configuration; up to 26.2m (86 ft.) with Sirit's EVR reader
Data Transfer Rate:	Up to 640 kbps

### Memory

On-chip Memory:	512 bits
EPC:	96 bits
Tag Identifier:	64 bits
Programmable user memory:	224 bits
Access password:	32 bits
Kill password:	32 bits
EEPROM data retention:	Min. 2 years
EEPROM write endurance:	10,000 cycles

### Physical Characteristics

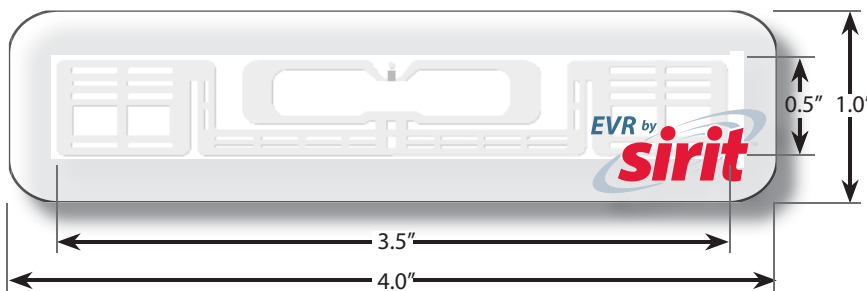
Dimensions (LxWxD):	Label - 101.6 x 25.4 mm (4.0 x 1.0 in.) Inlay - 89.2 x 12.7 mm (3.5 x 0.5 in.)
Weight:	6 g (0.2 oz.)

### Environment

ESD Voltage Immunity:	+/- 3kV
Operating Temperature:	-40°C to +85°C (-40°F to 185°F)
Storage Temperature:	-55°C to +125°C (-67°F to 257°F)
Relative Humidity:	30% - 70%
Material:	Construction - etched copper; substrate - PET

### Ordering Information

Part Number:	Description:
IDEVR-TAG-01	Identity EVR Transponder



Identity EVR Windshield Mount Transponder

### About Sirit Inc.

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 13 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).

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

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