

## FEATURES

- **Fully self-contained, integrated reader**
- **Reads eGo tags**
- **Ideal for parking, security access, vehicle registration/identification and mCommerce**
- **915 MHz RF band operation**
- **Wiegand capability**
- **Weatherproof enclosure**
- **Similar system interface as TransCore's SmartPass readers**
- **Selectable RF output power**
- **Quick, simple installation by trained, authorized personnel**

## eGo<sup>®</sup> 2101 Reader



**T**ransCore's eGo<sup>®</sup> 2101 Reader is a fully-integrated, self-contained 915 MHz wireless identification reader. It includes a radio frequency (RF) module, digital signal processor (DSP), power supply, antenna, I/O ports, and serial communications interface. The reader is ideal for parking, security access, vehicle registration/identification, and *mCommerce* applications with a requirement to read TransCore's eGo tags.

The eGo 2101 Reader reads TransCore eGo tags (64-bit tag ID only or 128 bits of specially programmed data), which are compliant with ANSI INCITS 256-2001 and International Organization for Standardization (ISO) 18000-6 standards. It can also read tags formatted to Wiegand format. Custom Wiegand 26-bit to 56-bit (inclusive) formats can be developed to match identification card formats used by existing security systems.

The eGo 2101 Reader transmits an RF signal that is reflected back from an RF tag. The eGo 2101 Reader then decodes the tag data carried by the reflected signal. The system transmits this data to a local host computer for processing. In multi-lane applications, if necessary, the readers can be synchronized using external hardware to allow operation in close proximity.

The unit has a weatherproof enclosure and is supplied with a pole-mount bracket specifically designed for controlled traffic lanes. The eGo 2101 Reader is quickly and easily installed and tested by trained, authorized personnel. It uses a similar system interface as TransCore's SmartPass<sup>®</sup> readers.

# eGo<sup>®</sup> 2101 Reader

## COMMUNICATIONS

### Frequency Range

902 to 928 MHz capable

912.5 to 919 MHz Federal Communications Commission (FCC)-authorized in the United States

### Internal Antenna Gain

9.5 dBi

### RF Control

By sense input or host command

### Polarization

Linear, horizontal

### Range

Optimum read range using the eGo Windshield Sticker Tag is 24.3 ft (7.4 m). Typical read range should be 12 to 17 ft (3.7 to 5.2 m).

### I/O Control

Input: Two independent dry contact closures for sense circuits

Output: Two independent Form-C contacts

### Communications Interface

RS-232 with Wiegand or RS-422 with Wiegand-compatible host interface

## POWER REQUIREMENTS

### Input Power

16 to 20V AC, 47 to 63 Hz, or 16 to 28V DC

### Output Power

2 W maximum to 200 mW minimum, selectable in 1dB steps

## LICENSING

Local regulations apply. Operation in the United States is regulated by the FCC.

The eGo 2101 Reader is verified to Part 15 of the FCC rules for a Class A digital device.

## PHYSICAL

### Dimensions

Size: 15.5 x 15.5 x 3.25 in (39.4 x 39.4 x 8.3 cm)

Weight: 9.5 lb (4.3 kg)

### Mounting Location

Pole or wall mount

Indoor or outdoor

### Enclosure

The system is environmentally sealed in a tamper-proof, polycarbonate housing.

## ENVIRONMENTAL

### Operating Air Temperature

-40°F to +131°F (-40°C to +55°C)

### Humidity

100% condensing

### Vibration

0.5 G<sub>rms</sub>, 10 to 500 Hz

## Standards

The eGo 2101 Reader complies with the requirements of Underwriters Laboratories UL-1950, Standard for Safety of Information Technology Equipment.

## OPTIONS

### Cable Accessory Kits

Cable Accessory Kits allow flexibility in installing the eGo 2101 Reader. Include the part number when ordering.

Part number 58-1620-001: Connector with 5 ft (1.5 m) cable

Part number 58-1620-002: Connector with 20 ft (6.1 m) cable

### Wall Mount Bracket

Allows adjustment in all planes when used to install the eGo 2101 Reader on a flat surface. Include the part number 54-1620-001 when ordering.

### Transformer

A Class C transformer (part number 76-1620-005) is available to allow 110V AC to 18V AC conversion. A 220V AC to 18V AC transformer (part number 76-1620-008) is also available. Include the part number when ordering.

### Training

Installation, operation, and maintenance training for TransCore authorized dealers is available through TransCore. For details, call (800) 755-0378.



**For product information call:** 1.800.923.4824 or 972.733.6600 (outside the U.S.) Fax 972.733.6486

[www.transcore.com](http://www.transcore.com)

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