

eGo[®] License Plate Tag

Features

- ▶ Read range of up to 16.4 feet (5 meters)
- ▶ 1024-bit read/write memory
- ▶ Ideally suited for electronic tolling, electronic vehicle registration, mCommerce, parking, and security access
- ▶ Non-battery



The eGo[®] License Plate Tag is 915 MHz radio frequency (RF)- programmable, beam-powered transponder. It is packaged in a water-resistant case. The characteristics of this tag make it ideal for applications that require exterior-mounted, low-cost, easily installed tags. These tags are suited for a variety of automatic vehicle identification transportation applications, including electronic tolling, electronic vehicle registration, mCommerce, parking, and security access applications.

TransCore's eGo License Plate Tag offers a new price/performance paradigm in radio frequency identification (RFID) technology. Using a revolutionary RFID tag-on-a-chip ASIC, the eGo License Plate Tag offers a read range of up to 16.4 feet (5 meters) and 1024-bit read/write memory at a fraction of the cost of older RFID technology. The tag provides the capability to read, write, rewrite, or permanently lock individual bytes. User-specified groups within a population of tags can be selected, read from, and/or written to using multi-tag access commands.

These tags are read by TransCore's eGo family of readers configurable to support a protocol compliant with the ANSI INCITS 256-2001 and the International Organization for Standardization (ISO) 18000-6 standards.

Optional features include custom external laser etching and custom programming. An optional Exterior Tag Accessory Kit that makes the installed tag tamper-resistant is also available.

eGo[®] License Plate Tag

COMMUNICATIONS

Frequency Range

902 to 928 MHz

Typical Working Range

0 to 16.4 ft (0 to 5 m)

Polarization

Linear, horizontal

Anti-collision Protocol

Efficient, binary tree-type anti-collision algorithm

SOFTWARE FEATURES

MEMORY

EEPROM

Byte resolution memory addressing

Byte resolution memory lock

1024 bits of total memory:

- ▶ Unique 64-bit tag ID locked at the factory
- ▶ 880 bits user memory formatted and locked as required by application. User memory includes 128 bits that are factory programmable.

Data Rate

Reads 8 bytes of data from a tag in less than 10 ms

Writes a single byte of data to a tag in less than 25 ms

LIFE EXPECTANCY

Service Life

Capable of unlimited reads and more than 100,000 write transactions

PHYSICAL

Dimensions

1.5 x 8.5 x 0.85 in. (3.8 x 21.6 x 2.15 cm)

Weight

3.8 oz. (108 g)

Mounting Method

Typically mounted with existing license plate brackets and hardware.

ENVIRONMENTAL

Operating Temperature

-40°F to +185°F (-40°C to +85°C)

Storage Temperature

-40°F to +203°F (-40°C to +95°C)

Humidity

95% non-condensing @ 104°F (40°C)

90% non-condensing @ 77°F to 131°F (25°C to 55°C)

Vibration Tolerance

1 Grms, 5 to 2000 Hz, 3 axes

Shock Tolerance

50 G, 1/2 sine pulse, 3 ms duration, 3 axes

Chemical Exposure

No tag damage in the following situations:

- ▶ exposed to water washing
- ▶ exposed to commonly spilled beverages, mild cleaning solutions, or vinyl plasticizers

Ultraviolet Radiation Exposure

Tag is not damaged by long-term exposure to sunlight.

STANDARDS

Fully compliant with ANSI INCITS 256-2001 and ISO 18000-6

COLOR

The eGo License Plate Tag standard case color is black.

OPTIONS

- ▶ Custom laser etching
- ▶ Customer-specific tag programming at the factory
- ▶ TransCore Exterior Tag Accessory Kit (P/N 19077-01). This kit makes the installed tag tamper-resistant.

MODELS AVAILABLE

13-0510-900: Full-frame license plate tag