TRANSCORE®

Encompass™ 2 Reader Model **2101**

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**

TransCore's Encompass™ 2 Reader Model 2101 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 Encompass 2 Model 2101 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 Encompass 2 Model 2101 transmits an RF signal that is reflected back from an RF tag. The Encompass 2 Model 2101 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 Ecompass 2 Model 2101 is quickly and easily installed and tested by trained, authorized personnel. It uses a similar system interface as TransCore's SmartPass® readers.

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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

Equipment License
The user is required to obtain a Part 90 site license from the FCC to operate the unit in the United States. Access the FCC Web site at www.fcc.gov/Forms/Form601/601.html for more information.

FCC ID: FIHXXXXXXXXXXX (See product label for actual ID number.)

Users in all countries should check with the appropriate local authorities for licensing requirements.

COMPLIANCE

RF Interference
Units have been tested and are verified to Part 15 of the FCC rules for a Class A digital device.

Safety
The Encompass 2 Model 2101 complies with the requirements of Underwriters Laboratories UL–1950, Standard for Safety of Information Technology Equipment.

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_{rms}, 10 to 500 Hz

OPTIONS

Cable Accessory Kits
Cable Accessory Kits allow flexibility in installing the Encompass 2 Model 2101. 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 Encompass 2 Model 2101 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.

DOCUMENTATION

Encompass™ 2 Reader System Guide for Model 2110 and Model 2101

TRANSCORE

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

www.**transcore**.com

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