

Encompass® 4

RFID Reader



TransCore's Encompass® 4 family of fully integrated wireless radio frequency identification (RFID) readers are designed for use in parking, security access, electronic vehicle registration (EVR), traffic management, low-speed electronic toll collection, fleet, trucking, and rail applications.

The Encompass 4 Reader has the capability to read SeGo, ATA, and IAG protocol tags¹. The reader can be ordered with up to two protocols enabled.

The Encompass 4 Reader communicates with the host computer through an asynchronous RS-232 or RS-422 serial line or through a Wiegand interface. The built-in Wiegand translator converts ATA, eGo, and SeGo tags into Wiegand data for compatibility with existing security systems.

Encompass 4 readers also provide expanded tag read buffering, programmable RF power and frequency, system integrity checking, and programmable group select.

Encompass 4 readers can be easily installed, tested, and maintained by authorized personnel.

Features

- ▶ Multiprotocol
- ▶ Built-in Wiegand translator
- ▶ Fixed mount, integrated package with water resistant enclosure
- ▶ Internal and external antenna models

Applications

- ▶ Parking
- ▶ Security access
- ▶ Electronic vehicle registration
- ▶ Traffic management
- ▶ Low-speed electronic toll collection
- ▶ Fleet, trucking, and rail applications

¹ Other protocols available on request

Encompass[®] 4 Reader

COMMUNICATIONS

Frequency Range

865 to 870 MHz capable
902 to 928 MHz capable
911.75 to 919.75 MHz FCC-authorized in US
902.25-903.75 and 910.00-921.50 CW (ATA only)²

Internal Antenna Gain

9.5 dBi

RF Control

By sense input or host command

Polarization

Linear, horizontal

Range

Read performance varies depending on tag and reader configuration and environment

HARDWARE FEATURES

I/O controls

Input: two independent dry contact closures for sense circuits

Output: two independent Form-C contacts

Communication Port

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

RF Output Power

Adjustable from 33 dBm (2W) to 23 dBm (200mW) in 1 dB 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 website at wireless.fcc.gov/uls for more information.³

FCC ID: FIH05531

Industry Canada ID: 1584A-05531

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

Complies with the requirements of 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 8.25 cm)

Weight: 9.5 lb (4.3 kg)

Mounting Location

Pole or wall mount
Indoor or outdoor

Enclosure

Tamper resistant, polycarbonate housing

ENVIRONMENTAL

Humidity

99% condensing

Vibration

0.5 G_{rms}, 10 to 500 Hz

Operating Temperature

-40°F to 131°F (-40°C to 55°C)

OPTIONS

Cable Accessory Kits

Cable Accessory Kits allow flexibility in installing the Encompass 4.

58-1620-001: connector with 5ft (1.5m) cable

58-1620-002: connector with 20ft (6.1m) cable

58-1620-006: connector with 35ft (10.6m) cable

Wall Mount Bracket

Allows adjustment in all planes when used to install the Encompass 4 on a flat surface

54-1620-001: Mounting Kit

Transformer

Class C transformer available to allow 110V AC to 18V AC conversion

76-1620-005: Transformer 120V AC - 18V AC

Training

Installation, operation, and maintenance training for TransCore authorized dealers is available through TransCore. For details, contact TransCore Sales Support.

² 902.75-903.50 are not recommended. Although these frequencies are approved by the FCC, certain auto manufacturers use these frequencies for their key fobs. As a result, this reader may interfere with the key fob's signal, negatively affecting the ability of the fob to communicate with the vehicle.

³ Contact TransCore Sales Support for information concerning regulatory requirements for your region.

For more information:

Sales Support

800.923.4824

Technical Support

505.856.8007

transcore.com

