



# Encompass 4 Flex

RFID Reader

TransCore's Encompass® 4 Flex fully integrated wireless radio frequency identification (RFID) reader is 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 Flex Reader has the capability to read SeGo, eGo, ATA, ISO/IEC 18000-63, and IAG protocol tags. The reader can be ordered with up to three protocols enabled.

The Encompass 4 Flex Reader communicates with the host computer through an asynchronous RS-232, RS-422 serial line, Ethernet, or through a Wiegand interface. The built-in Wiegand translator converts SeGo, eGo, ATA, ISO/IEC 18000-63, and IAG tags into Wiegand data for compatibility with existing security systems.

LED indicators are located on both the front and back of the reader, showing PWR/BLE, RF on, and Tag in Field.

Installation is simplified with the addition of a sealed door that allows access to the terminal block. The terminal block can be unplugged when necessary.

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

Encompass 4 Flex 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
- ▶ RS-232 and RS-422
- ▶ Ethernet (TCP/IP, Webserver, POE)
- ▶ Bluetooth Low Energy (for diagnostics)
- ▶ Front and back LED indicators
- ▶ Terminal block access and connection via sealed door

## Applications

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



# Encompass 4 Flex

## COMMUNICATIONS

### Frequency Range

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)<sup>1</sup>

### 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 Ports

Autodetect: RS-232, RS-422, Ethernet  
Wiegand, BLE (for diagnostics)

## POWER REQUIREMENTS

### Input Power

POE: Class 5 (IEEE 802.3b+ Compliant)  
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](https://wireless.fcc.gov/uls) for more information.<sup>2</sup>

**FCC ID:** FIHE4FPT90V1

**Industry Canada ID:** 1584A-E4FRSS137V1

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 62368-1, 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  
IP54 Rated Per EN60259

## ENVIRONMENTAL

### Humidity

99% condensing

### Vibration

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

### Operating Temperature

-40°F to 131°F (-40°C to 55°C)

## OPTIONS

### 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.

<sup>1</sup> 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.

<sup>2</sup> 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](https://transcore.com)

