

# **Encompass® 4-S**

# RFID Reader

TransCore's Encompass® 4-S is a fully integrated wireless radio frequency identification (RFID) reader designed for use in parking, security access, fleet, and trucking applications. The Encompass 4-S is a compact version of TransCore's Encompass 4, for installations that require a smaller profile.

The Encompass 4-S is capable of reading the following protocols and formats:

- ► TransCore Super eGo® (SeGo)
- eGo (ISO 18000-6B)
- ATA/AAR/ISO 10374
- Interagency Group (IAG-TDM)
- Wiegand
- Serial (RS–232 or RS–422)

The Encompass 4-S reader's built-in Wiegand translator converts ATA, eGo, SeGo, and IAG-TDM tag protocols into Wiegand data for compatibility with existing security systems. The Encompass 4-S reader also provides expanded tag read buffering, programmable RF power and frequency, system integrity checking, and programmable group select.

The Encompass 4-S reader can be easily installed, tested, and maintained by authorized personnel. The command set is compatible with TransCore's SmartPass®, Encompass 2, and Encompass 4 readers.



# **Features**

- Multiprotocol
- Built-in Wiegand translator
- Fixed mount, integrated package with water resistant enclosure

# **Applications**

- Parking
- Security access
- ▶ Fleet
- Trucking



# Encompass® 4-S 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)\*\*

# 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 RS-422

#### **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 18 dBm (63mW)

# **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 <a href="www.wireless.fcc.gov/uls">www.wireless.fcc.gov/uls</a> for more information.\*

FCC ID: FIHE4SPT90V45

Industry Canada ID: 1584A-E4SPT90V45

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:** 13.3 x 9.3 x 4.0 in (101.6 x 33.8 x 23.6 cm)

Weight: 8.9e lbs (3.9 kg)

# **Mounting Location**

Pole or wall mount Indoor or outdoor

#### **Enclosure**

Polycarbonate/aluminum housing

#### **ENVIRONMENTAL**

#### Humidity

100% condensing

#### Vibration

1 G<sub>rms</sub> 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-S.

**58-1620-001:** connector with 5 ft (1.5 m) cable **58-1620-002:** connector with 20 ft (6.1 m) cable

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

# Wall Mount Bracket

Allows adjustment in all planes when used to install the Encompass 4-S 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>\*</sup> Contact TransCore Sales Support for information concerning regulatory requirements for your region.

<sup>\*\* 902.75-903.50</sup> 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.