

# Encompass® 1 Rugged Flex

TransCore's Encompass® 1 Rugged Flex (E1R Flex) combines TransCore's reliable RFID module with the ruggedized M9020 mobile computer, creating a powerful tool for all of your data collection needs.

The E1R Flex can withstand harsh work environments. Whether you are working in hot and dusty conditions or in cold and damp weather, the E1R Flex keeps performing. The multiple comfort grips accommodate right or left-hand use. The hardened 7-inch touchscreen automatically switches from landscape to portrait view, and the screen automatically adjusts for viewing in bright sunlight. You can easily key in information with the convenient built-in QWERTY keyboard. The E1R Flex combines ample storage and memory with a fast dual-core processor, offering the user unparalleled utility in today's demanding workplace.

## Versatile

The E1R Flex is designed for electronic vehicle registration and compliance; rail and fleet applications; electronic toll collection; and government, airport, and parking/security access applications. The E1R Flex can read from eGo Plus tags (in SeGo and eGo protocols); eGo tags; Wiegand formatted tags; Allegro tags; Association of American Railroads (AAR) tags; American Trucking Associations ISO 10374 (ATA) tags programmed as full frame or half frame; and CALTRANS Title 21 tags. The E1R Flex can verify tag read exceptions encountered at fixed reader RFID sites, such as commercial, private, government, and airport parking facilities.

The E1R Flex can write to eGo Plus tags in SeGo and eGo protocols in authenticated mode, eGo tags, and IT2000 tags.



## Features

- Multiprotocol RFID reader and mobile computer in a single, portable unit
- Designed for a variety of applications from security access to harsh rail environments
- Reads from multiple protocols:
  - ATA/AAR/ISO full frame and half frame
  - CALTRANS Title 21
- Reads from and writes to multiple protocols (additional write licensing required):
  - TransCore Super eGo® (SeGo)
  - eGo (ISO 18000-6B)
  - TransCore IT2000 (Allegro)
- QWERTY keyboard
- 5 programmable function keys
- WiFi 802.11 b/g and Bluetooth®
- GSM/GPRS wide area networking
- Designed for use in harsh operating environments

# Encompass<sup>®</sup> 1 Rugged Flex

## FREQUENCY

915 MHz band frequency-hopping for unlicensed operation in the United States and Canada

## READ RANGES

Typical read ranges: 7 to 20 ft (2.13 to 6.10 m) (depending on tag type and operating environment)

## WRITE RANGES

Typical write ranges: 70% of read range for eGo Plus and eGo; 100% of read range for IT2000 (Allegro)

## HARDWARE FEATURES

### Power Requirements

Rechargeable 3100 mAh lithium-ion battery pack with fast charge feature

### LED

Charging status/low battery indicator

### Keypad and Buttons

QWERTY keyboard  
Dedicated scanner and camera buttons  
5 programmable function keys

### Integrated Scanner / Data Capture

1D/2D barcode scanner  
5.0 MP rear camera with auto-focus/flash  
2.0 MP front camera

## PHYSICAL CHARACTERISTICS

### Weight

Mobile computer with battery: 2.5 lb (1.33 kg)

### Dimensions

Height: 2.0 in. (5.1 cm)  
Width: 7.3 in. (18.5 cm)  
Length: 9.0 in. (2.5 cm)

## ENVIRONMENT

### Operating Temperature

-22°F to 122°F (-30°C to 50°C)

### Storage Temperature

-22°F to 158°F (-30°C to 70°C) with battery

### Humidity

5% to 95%, relative, non-condensing

### Free-Fall Drop Resistance

Meets/exceeds IEC 68-2-32 32 method 1

### Environmental Ratings

Meets MIL-STD 810F method 512.4 procedure 1 IP67

## COMPLIANCE

### RF Interference

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

## HAZARDOUS MATERIALS

RoHS compliant

### Safety

CE International Safety

## NETWORKING

### Wireless LAN

IEEE 802.11 b/g (2.4 GHz)

### Wireless PAN

Integrated Bluetooth Class 2, V2.0

### Wireless WAN

GSM/GPRS

## SOFTWARE/FIRMWARE FEATURES

### Protocols (standard)

ATA/AAR/ISO  
eGo (ISO 18000-6B)  
Super eGo (SeGo)  
Intellitag 2000 (Allegro)  
CALTRANS Title 21

### Tag Format

Wiegand  
AAR

### Software Developer's Kit

To further assist in customer application program development, an optional software developer's kit (SDK) with SDK documentation is available upon request

### Tag/Reader Demonstration Software

Preloaded TransCore application program using the available API and SDK.

## LICENSING

### License Certificate

A separate License Certificate, provided electronically (P/N 25-1000-001) is required for configuring the customer tag writing requirements

### Accessories

Accessory kit includes battery charger, 2 spare batteries, AC power adapter, stylus, hand strap, and quick start guide

### Documentation

Encompass<sup>®</sup> 1R Flex Quick Start Guide

## For more information:

### Sales Support

800.923.4824

### Technical Support

505.856.8007

[transcore.com](http://transcore.com)