Encompass® 1 Rugged
Tablet Reader

TransCore's Encompass® 1 Rugged (E1R) combines TransCore's mobile radio frequency identification (RFID) technology with a ruggedized tablet computer, creating a powerful tool for all of your data collection needs.

The E1R offers 915MHz and 870MHz RFID variants for global compatibility. Whether working in hot, dusty conditions or cold, damp weather, the E1R is designed to withstand some of the harshest working environments.

In hazardous locations, the optional Class 1, Division 2 rated unit offers the same durability in a non-incendive package.

The E1R provides WiFi, Bluetooth, GPS, and 4G wireless connections for interfacing with a variety of networks and peripheral devices. The tablet also offers USB and RS232 ports for added convenience.

The E1R is ideal for all mobile RFID solutions including AEI for railyard management, remote/field programming, toll plaza and HOT enforcement, parking/access control, and warehouse management.

Features

▶ Integrated multiprotocol RFID reader and tablet computer

▶ Non-Incendive model for use in hazardous locations

▶ Reads from and writes to multiple protocols and formats (additional write licensing required).
- TransCore Super eGo® (SeGo)
- eGo (ISO 18000-6B)
- ATA/AAR/ISO 10374
- Title 21 (T21)
- Wiegand

▶ WiFi 802.11 b/g, Bluetooth®, GPS, and 4G wireless support

▶ Barcode scanner, front and rear cameras

Applications

▶ Automatic Equipment Identification (AEI)

▶ Remote/Field Programming

▶ Toll/High-Occupancy Toll (HOT) Enforcement

▶ Parking/Access Control

▶ Warehouse Management

TRANSCORE®
Trusted Transportation Solutions

Encompass® 1 Rugged

FREQUENCY

902-928MHz (US/Canada) or 865-868MHz (ETSI/EU)*

Additional regions available for global compatibility

READ RANGES

Typical read range: 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

HARDWARE FEATURES

Power Requirements

Two rechargeable 3100 mAh lithium-ion battery packs with fast charge feature

LED Indicator

Charging status/low battery

Keypad and Buttons

- QWERTY keyboard
- Dedicated barcode 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 batteries: 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 104°F (-30°C to 40°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 Method 1

Dust/Water Ingress

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

Safety

UL 62368-1/CSA C22.2 No. 62368-1, Safety Audio/video, information and communication technology equipment – Part 1: Safety requirements - Third Edition

Hazardous Materials

870MHz ETSI E1R variants meet RoHS and CE International Safety compliance

NETWORKING

Wireless LAN

IEEE 802.11 b/g (2.4 GHz)

Wireless PAN

Integrated Bluetooth Class 2, V2.0

Wireless WAN

GSM/GPRS 4G LTE

SOFTWARE/FIRMWARE FEATURES

Protocols

Super eGo (SeGo)
eGo (ISO 18000-6B)
ATA/AAR/ISO 10734
Title 21 (T21)

Tag Format

Wiegand
AAR

Software Development Kit

To further assist in customer application development, an optional software development kit (SDK) with documentation is available on request

LICENSING

License Certificate

A separate license certificate, (P/N 25-1000-NNN) is required for writing to tags

Hazardous (Classified) Locations

Non-Incentive model meets ANSI/ISA 12.12.01 for use in Class I & II, Division 2 and Class III, Divisions 1 & 2 Hazardous (Classified) Locations; CSA C22.2 No. 213 for use in Class I, Division 2 Hazardous Locations

ACCESSORIES

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

PART NUMBERS

20-9920-NNN Standard 915MHz E1R
20-9921-NNN Non-Incentive 915MHz E1R
20-9922-NNN 870MHz ETSI E1R

For more information:

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transcore.com

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