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
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 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 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**
Meets UL60950-1/CSA C22.2 No. 60950-1 Second Edition: Safety of IT Equipment

**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-Incendive 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 battery charger, 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-Incendive 915MHz E1R
20-9922-NNN 870MHz ETSI E1R

For more information:

**Sales Support**
800.923.4824

**Technical Support**
505.856.8007

transcore.com

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