

FEATURES

- **Multi-protocol portable reader and mobile computer**
- **Read TransCore eGo® , eGo Plus (SeGo mode), and ATA/ISO tags**
- **TransCore-provided Application Programmers' Interface (API)**
- **Multitag sorting**
- **Ideal for exception-based scanning**
- **Reduces errors and redundant manual data entry**
- **Ideal for electronic vehicle registration and compliance, rail, fleet, electronic toll collection, Homeland Security, airports, and parking applications**
- **Integrated circular polarized antenna**
- **Rugged design withstands the harshest environments**
- **Rechargeable lithium-ion battery pack**
- **All necessary components are provided in convenient kit**

Encompass® 1 Handheld Reader



TransCore's Encompass® 1 Handheld Reader combines the TransCore RFID Scan Handle and the Intermec Series 700 Color Mobile Computer (models 741, 751, and 761 only). The handheld reader is ideal for radio frequency identification (RFID) applications requiring an extended read range, multitag sort, read/write capability, and memory capacity not provided by proximity technology.

TransCore offers the handheld reader as part of its product line designed for transportation-based applications. The handheld reader is suitable for electronic vehicle registration and compliance, rail, fleet, electronic toll collection, Homeland Security, airports, and parking applications. The handheld reader allows users to read and store tag information eliminating time-consuming tag data entry tasks.

The handheld reader offers users the capability of verifying tag read exceptions at fixed-reader RFID sites, such as commercial, private, government, and airport parking facilities. The handheld reader can read TransCore eGo® and eGo Plus in Super eGo (SeGo) mode RFID tags up to 3 feet (0.9 meters) away. It can read from Association of American Railroads (AAR), American Trucking Associations (ATA), International Organization for Standardization (ISO) tags, whether programmed as full frame or half frame, up to 4 feet (1.2 meters) away. Multitag sorting, or filtering, allows the user to specify groups within a population of eGo or eGo Plus (SeGo mode) tags to be selected and read from. The handheld reader can identify up to 6 eGo tags per second and can retain up to 100 tag IDs in volatile memory.

The Encompass 1 Handheld Reader is designed for easy, comfortable scanning, yet it is rugged enough to withstand harsh working environments. The rechargeable lithium-ion battery pack powers the RFID reader for an entire shift.

Encompass[®] 1 Handheld Reader

FREQUENCY

902- to 928-MHz spread-spectrum frequency-hopping for unlicensed operation in the United States

READ RANGES

Reads eGo and eGo Plus (SeGo mode) tags at a distance of 3 feet (0.9 m).

Reads ATA tags at a distance of 4 feet (1.2 m).

SOFTWARE/FIRMWARE FEATURES

Protocols

Handheld reader software fully supports the ANSI INCITS 256-2001 for Application Peripheral Interface (API), parts 2, 3.1, and 4.2.

Application Programmers' Interface (API)

TransCore-developed API is provided in order to simplify and expedite customer application software development.

Communications Interface

Infrared data connection between the RFID Scan Handle and 700 Series Color Mobile Computer

Data Rate

eGo Plus (SeGo mode) tags: 80 kbps

eGo tags: 33 to 40 kbps

ATA tags: 10 kbps

Multitag Access (Filtering)

User-specified groups within a population of eGo tags can be selected and read from using multitag access commands.

HARDWARE FEATURES

Power Requirements

Removable lithium-ion battery pack

Note: Intermec 700 Color Mobile Computer requires a separate battery pack and charger.

LEDs

LEDs located on the Scan Handle indicate the status of the following reader features: reader power, host communications, RF power, tag communications, and battery power.

PHYSICAL CHARACTERISTICS

Weight

Scan Handle with battery: 1.06 lbs (0.48 kg)

Scan Handle with 700 color mobile computer and battery: 2.29 lbs (1.04 kg)

ENVIRONMENT

Operating Temperature

-4°F to 131°F (-20°C to 55°C)

Storage Temperature

-40°F to 158°F (-40°C to 70°C)

Humidity

0 to 95%, relative, non-condensing

Shock

20 G, 1/2 sine pulse, 11 ms duration, during operation

Vibration

1.0 G_{rms}, 10 to 500 Hz, 3 axes during operation

Environmental Ratings

Scan Handle is sealed against windblown rain and dust International Electrotechnical Commission ((IEC) 529 rated at IP54).

Mobile computer rated IP64 for environmental protection and MIL-STD-810F drop testing.

STANDARDS

Communications

The TransCore RFID Scan Handle conforms to the following standards:

Automotive Industry Action Group B-11

ANSI INCITS 256:2001 - Parts 2, 3.1, and 4.2

ANSI MH10.8.4

ISO/IEC WD18000 Part 6

Approvals

cULus listed accessory

COMPLIANCE

RF Interference

Federal Communications Commission (FCC) Part 15/Industry Canada ICES-003/ CISPR Class B digital emissions

SCAN HANDLE BATTERY PACK

1200 milliamp-hour, 90-135V AC, 50Hz/60Hz, lithium ion with integral charger and 4-hour charge time

ACCESSORIES

Dual-pack battery charger

MODELS AVAILABLE

Tri-protocol: ATA, eGo, and Super eGo

Contact TransCore for ordering information

DOCUMENTATION

Encompass[®] 1 Handheld Reader Quick Start Guide

Encompass[®] 1 Handheld Reader Application Programming Interface



For product information call: 1.800.923.4824 or 214.461.4031 (outside the U.S.) Fax 214.461.6478

www.transcore.com

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