

Encompass[®] 1i Handheld Reader for CN70e

Features

- ▶ Portable multiprotocol reader and mobile computer
- ▶ Suitable for electronic vehicle registration and compliance, rail, fleet, electronic toll collection, government, airport, and parking/security access applications
- ▶ Ideal for exception-based scanning
- ▶ Reduces errors and redundant manual data entry
- ▶ Reads the following protocols:
 - ATA full-frame and half-frame
 - TransCore Super eGo[®]
 - eGo (ISO 18000-6B)
 - Wiegand
- ▶ WiFi 802.11 b/g standard
- ▶ Bluetooth standard
- ▶ QWERTY-numeric or numeric-only keypad
- ▶ 1D/2D area imager standard
- ▶ Wide area networking optional
- ▶ TransCore supplied software¹
- ▶ Tag/reader demonstration
- ▶ Application programmer's interface
- ▶ Software developer's kit
- ▶ Rated for use in harsh operating environments
- ▶ Components provided in convenient kits for easy ordering
- ▶ Optional UL listed non-incendive models

1. When RFID scan handle reader and mobile computer are purchased from TransCore



The Encompass[®] 1i Handheld Reader for CN70e combines TransCore's IP30 TC RFID Scan Handle and the Intermec CN70e Mobile Computer. The handheld reader is ideal for radio frequency identification (RFID) applications requiring an extended read range, multi-tag sorting, and memory capacity not provided by proximity technology.

TransCore's E1i handheld reader is designed for transportation specific applications. It is ideal for electronic vehicle registration and compliance, rail, fleet, electronic toll collection, government, airport, and parking/security access applications. The handheld reader allows the user to easily read and store tag information, eliminating time-consuming and error-prone manual data entry.

The E1i handheld reader offers the capability of verifying tag read exceptions encountered at fixed-reader RFID sites, such as commercial, private, government, and airport parking facilities. The handheld reader's typical read range is 8 to 20 feet (2.4 to 6.1 meters) depending on the tag type being read. The handheld reader can read from the following tag types: TransCore eGo and eGo Plus in Super eGo (SeGo) mode RFID tags; Association of American Railroads (AAR); American Trucking Associations (ATA); and International Organization for Standardization (ISO) tags, whether programmed as full frame or half frame. Multi-tag 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.

The Encompass 1i handheld reader for CN70e is designed for easy, comfortable RFID reading, yet it is rugged enough to withstand harsh working environments. The rechargeable lithium-ion battery pack powers the RFID reader for an entire shift.

The CN70e keypad is available in either a QWERTY-numeric or numeric-only configuration.

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Encompass® 1i Handheld Reader for CN70e

FREQUENCY

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

READ RANGES

Typical read ranges: 8 to 20 ft (2.4 to 6.1 m) (tag dependent)

DATA RATE

Typical data rates: 10 to 80 kbps (protocol dependent)

MODELS AVAILABLE

ATA/AAR read only
Super eGo/eGo/ATA read only

HARDWARE FEATURES

Power Requirements

IP30 TC – Removable 2400 mAh lithium-ion battery pack
CN70e – Battery Pack: 3.7 V, 4000 mAh lithium-ion, rechargeable and removable

LEDs

LEDs located on the IP30 TC for CN70e RFID Scan Handle indicate the following statuses: (1) reader power; (2) host communications; (3) RF power; (4) tag read; and (5) battery status

Keypad

Choice of QWERTY with separate numeric keypad or numeric-only keypad

Integrated Scanner (standard)

1D/2D omni-directional area imager suitable for reading bar codes and signature capture

Hazardous Location Certifications (optional)

UL listing (United States and Canada)
Division 2, Class I, Groups A, B C, D:T4
Division 2, Class II, Groups F, G, T4
Division 2, Class III, T4

PHYSICAL CHARACTERISTICS

Weight

TransCore IP30 TC: 0.95 lbs (430g)
CN70e (with battery): 1.1 lbs (491g)

Dimensions

CN70e Mobile Computer:
7.7 x 3.2 x 1.3 in. (19.5 x 8.0 x 3.4 cm)

ENVIRONMENT

Operating Temperature

5°F to 122°F (-15°C to 50°C)

Storage Temperature

-22°F to 158°F (-30°C to 70°C)

Humidity

10 to 95% humidity, non-condensing

COMPLIANCE

RF Interference

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

Drop Survival

CN70e mobile computer: 8 ft (2.4 m) drop to concrete per MIL-STD-810G

IP30 TC for CN70e: 4 ft (1.2 m) drop 26 times to concrete

Environmental Ratings

IP30 TC for CN70e: windblown rain and dust resistance rating in accordance with International Electrotechnical Commission (IEC) 529: IP64

CN70e mobile computer: windblown rain and dust resistance rating in accordance with IEC 529: IP67

COMMUNICATIONS

IP30 TC to CN70e Mobile Computer

Bluetooth

CN70e Client to Host

Ethernet (standard)
USB 1.1 (host and client)
IrDA

NETWORKING

Wireless LAN (standard)

IEEE 802.11 b/g (2.4 GHz)

Wireless PAN (standard)

Integrated Bluetooth Class 2, V2.0

Wireless WAN (optional)

GSM/GPRS/EDGE or
CDMA/1xRTT/EV-DO

SOFTWARE/FIRMWARE FEATURES

Protocols

ATA/AAR
eGo (ISO 18000-6B)
Super eGo (SeGo)

Multi-tag Access (Filtering)

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

Application Programming Interface

To simplify and expedite customer application development, each CN70e mobile computer purchased from TransCore includes a preloaded application programming interface (API).

Software Developer's Kit

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

Tag/Reader Demonstration Software

Preloaded TransCore application program using the available API and SDK

- ▶ Manages interaction between mobile computer and RFID scan handle
- ▶ Detects tag type, reads tag data, decodes and parses data (when required), and displays read data in human readable form
- ▶ Supports full frame and half frame tags and can decode ATA, standard AAR, and Wiegand encoded tags
- ▶ Provided at no additional cost on E1i readers purchased from TransCore

ACCESSORIES

Mobile computer accessory kit includes single dock/charger, single dock Ethernet module, power supply, power cord, and Quick Start Guide

DOCUMENTATION

Encompass® 1i Handheld Reader Quick Start Guide
Software developer's kit documentation

For more information:

Call **214.461.6443** (Sales Support) • **505.856.8007** (Technical Support)

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