

## Product profile

# Ci70

i.roc® Ci70 -Ex  
Intrinsically Safe  
Mobile Computer



Based on the successful 70 Series mobile computer family, the Ci70 combines global certifications for hazardous environments with today's cutting-edge technologies.

- Global approvals for explosive environments—ATEX through IECEx to NEC
- Available high performance 2D near/far scanning technology—a first for intrinsically safe mobile computers
- Comprehensive wireless network coverage—WWAN or WLAN and Bluetooth 2.1 for rapid data exchange
- Available RFID reading capability supporting a wide range of frequencies—LF, HF, or UHF
- As with devices based on the 70 Series platform, the Ci70 offers a high level of compatibility with Intermec Developer Library software applications and tools

Traditionally, mobile computers for use in hazardous environments have been hamstrung with outdated technology and limited configuration options, requiring users to make significant tradeoffs. But Intermec and ecom® have combined their expertise to create a new paradigm in intrinsically safe mobile computing that doesn't require compromises: the Ci70.

Featuring the highest number of global approvals for hazardous environments, the Ci70 is the best choice for workers in the chemical, oil and gas, and pharmaceutical industries. It meets or exceeds stringent requirements for gases, vapors and liquids, dusts, and fibers.

The Ci70 includes many breakthrough advances now available in an intrinsically safe mobile computer for the first time. Complete wireless networking capabilities—from WWAN to WLAN and Bluetooth 2.1—help ensure rapid data exchange, even where reception conditions prove challenging. Available near/far imaging technology now allows operators in hazardous environments to scan bar codes from near contact to over 50 feet away. Even radio frequency detection (RFID) capability can be added via a head module.

Because Ci70 is built on the 70 Series architecture, it is fully compatible with relevant development tools and applications in the Intermec Developer Library, and even includes many of the same design elements. Those accustomed to Intermec mobile computers will find the Ci70's laser-etched keypad to be instantly familiar. The Ci70 is also compatible with FlexDock, Intermec's modular charging system, by means of a field-replaceable cup.

When the reliability, efficiency and accuracy of your operations are the foundation to your competitive advantage, there is no room for compromise. With the Ci70 and full family of 70 Series mobile computers, you have the unsurpassed performance and reliability to run your operations with confidence.

***The i.roc® Ci70 -Ex is manufactured and serviced exclusively by ecom instruments. This product will be available for purchase only from ecom authorized distributors and their partners.***

## Physical

### Dimensions (Standard Configuration):

225 x 85 x 58 mm (9.8 x 3.3 x 2.3 in.)

### Dimensions (Includes Optional Head Module):

249 x 85 x 58 mm (8.8 x 3.3 x 2.3 in.)

**Weight (Includes Battery):** 900 g (2 lbs)

## Environmental

**Operating Temperature:** -20°C to +50°C (-4°F to +120°F)

**Storage Temperature:** -20°C to +60°C (-4°F to +140°F)

**Drop Specification:** 1.2 m (4 ft) according to MIL-STD-

810G at -20°C and +50°C (-4°F and +120°F)

**Electrostatic Discharge:** ± 8 kV contact discharge,  
± 15 kV air discharge

**Rain & Dust Resistance:** IP65

## Battery

**Type:** Replaceable and rechargeable lithium ion pack,  
IEEE 1725 compliant

**Capacity:** 4000 mAh (3.7 V)

## Hardware

**Microprocessor:** Texas Instruments 1GHz multi-engine  
processor architecture

**Memory and Storage:** 512 MB RAM; 1 GB flash ROM;  
customer-accessible microSD slot for removable  
memory cards up to 32 GB

**Display:** Transmissive TFT-LCD touchscreen display;  
8.9 cm (3.5 in); VGA (480 x 640 pixels); 65,536 colors  
(16-bit RGB); high-durability with Gorilla Glass®; LED  
backlight; ambient light sensor

**Keypad:** Backlit numeric or QWERTY layout; both  
keypad options feature hard keycaps with laser-etched  
legends

**GPS:** A-GPS with 12 channels; network independent

autonomous mode; supports assisted operation via WAN

**Sensors:** Accelerometer, ambient light

## Operating System

Microsoft® Windows Embedded Handheld built on  
Windows 6.5.3 technology

## Optional Software

**App Development:** [Intermec Developer Library](#)

**Data Management:** [Skynax® Mobility Management  
System](#)

**Device Management:** [Intermec SymartSystems™](#)

support includes ScanNGo provisioning for use alone or  
with device management software from Intermec ISVs

**Device Health Monitoring:** Remote access requires  
SmartSystems Management option

## Interfaces

USB Full Speed 2.0 Client, IrDA

## Integrated Radios

**Optional Wireless WAN:** UMTS/HSDPA/HSUPA

*UMTS Frequencies:* 800, 850, 900, 1900, 2100 MHz

*GSM/GPRS Frequencies:* 850, 900, 1800, 1900 MHz

*Max Data Rate (Network Dependent):*

5.76 Mbps uplink, 14.4 Mbps downlink

*Antenna:* Internal

**Optional Wireless WAN:** CDMA/EVDO Rev. A

*CDMA Frequencies:* 800, 1900 MHz

*Max Speeds (Network Dependent):* 1.8 Mbps

uplink, 3.1 Mbps downlink

*Antenna:* Internal

**Wireless LAN:** IEEE® 802.11 a/b/g/n, dual-band, Cisco  
CCXv4 compliant

*Security:* Wi-Fi Certified for WPA and WPA2,

WAPI Certified

*Authentication:* 802.1x

*Encryption:* AES, TKIP, WEP (64 or 128 bit)

**Wireless PAN:** Integrated Bluetooth® Class II,  
Version 2.1+EDR

*Operating Channels:* 0 to 78 (2402 to 2480 MHz)

*Data Rate:* 1, 2, 3 Mbps

*Antenna:* Internal

## Imaging & Reading

With optional factory replaceable head modules, the  
imaging and reading capabilities of Ci70 can be enhanced:

- Near/far range 2D area imager—offering the  
unparalleled flexibility to read 1D and 2D bar codes,  
omni-directionally, at distances from 15 cm to over 15 m
- Linear laser—scan 1D bar codes at close proximity
- RFID reader—supporting HF, LF, and UHF

## Audio

Loudspeaker; wireless Bluetooth headset support;  
VOIP, speech recognition and audio recording  
capabilities via headset

## Optional Accessories

Compatible with FlexDock modular docking and  
charging system. Additional accessories include: carrier  
strap; microSD card; display protection film; handle;  
and leather case.

## Regulatory Approvals & Conformity

**Safety:** 60950-1

**EMC:** FCC, CE


**Laser:** IEC/EN 60825-1 Class 2

**Environmental:** WEEE, RoHS


**Radio:** FCC, CE

**Battery:** IATA


## Hazardous Environment Certifications


 NEC Gas Class I, Division 1, A, B, C, D T4


 NEC Dust Class II, Division 1, E, F, G T4

 NEC Fibers Class III, Division 1

 ATEX Gas (Zone 1) IIC T4

 ATEX Dust (Zone 21) IIIC IP 64

 IECEx Gas (Zone 1) IIC T4

 IECEx Dust (Zone 21) IIIC IP 64

Certificates pending!



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