Traditionally, mobile computers for use in hazardous environments have been hamstrung with outdated technology and limited configuration options, requiring users to make significant tradeoffs.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 Honeywell and ecom® have combined their expertise to create a new paradigm in intrinsically safe mobile computing that doesn’t require compromises: the i.roc® Ci70 -Ex Intrinsically Safe Mobile Computer.

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

The Ci70 mobile computer 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 allows operators in hazardous environments to scan barcodes from near contact to over 50 feet away. Even radio frequency detection (RFID) capability can be added via a head module.

Because the Ci70 mobile computer is built on the 70 Series architecture, it is fully compatible with relevant development tools and applications in the Honeywell Developer Library, and even includes many of the same design elements. Those accustomed to Honeywell mobile computers will find the Ci70 mobile computer’s laser-etched keypad to be instantly familiar. The Ci70 mobile computer is also compatible with FlexDock, Honeywell’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 mobile computer is manufactured and serviced exclusively by ecom instruments. This product will be available for purchase only from ecom authorized distributors and their partners.

FEATURES & BENEFITS

The Ci70 mobile computer combines global certifications for hazardous environments (including ATEX, IECEx and NEC) with today’s cutting-edge technologies.

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 Honeywell Developer Library software applications and tools.
Ci70 Technical Specifications

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 1 GHz 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: Backlight 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

OPERATING SYSTEM
Microsoft® Windows® Embedded Handheld built on Windows 6.5.3 technology

OPTIONAL SOFTWARE
Application Development: Honeywell Developer Library
Data Management: Skynax® Mobility Management System
Device Management: Honeywell SmartSystems™ Foundation support includes ScanNGo provisioning for use alone or with device management software from Honeywell 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 the Ci70 mobile computer can be enhanced:
- Near/far range 2D area imager – offering the unparalleled flexibility to read 1D and 2D barcodes, omnidirectionally, at distances from 15 cm to over 15 m
- Linear laser – scan 1D barcodes 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
NEC Dust Class II, Division 1
NEC Fibers Class III
MSHA Mining (Methane Air Mixtures)
ATEX Gas (Zone 1) IIC T4
ATEX Dust (Zone 21) IIIC IP 64
ATEX Mining (M1) I Ma
IECEx Gas (Zone 1) IIC IP 64
IECEx Dust (Zone 21) IIC IP 64
IECEx Mining (M1) I Ma

For the latest list of certifications please go to https://www.ecom-ex.com/products/mobile-computing/pda/iroc-ci70-ex/.

For a complete listing of all compliance approvals and certifications, please visit www.honeywellaidc.com/compliance.
For a complete listing of all supported barcode symbologies, please visit www.honeywellaidc.com/symbologies.