

Intermec Mobile Computers for Hazardous Locations Selection Guide





How to determine which computer is right for you.

When you're specifying mobile solutions for workers in hazardous environments, safety is paramount. That much is clear. The choices can seem complex, however. Here are some steps to get you started.

Identify the hazard

Begin by defining the kind of hazards present in your environment. Are there flammable gases, vapors or liquids? How about combustible dusts or ignitable fibers? Are these hazards present all of the time, during normal operating conditions, or only occasionally? These distinctions – the kind of hazard, and how prevalent it is – will determine the safety ratings required for your mobile equipment. Consult with your company's safety engineer to identify the specific hazards that are present in your operation.

Consider your operating locations

Are you specifying a mobile device for one location, or twenty? Are those locations in one country, or several? While safety requirements are becoming more similar across the globe, there are still significant variations. There are three common standards organizations that define the safety requirements for device manufacturers.

- Underwriters Laboratory (UL) – United States, Canada, Mexico - www.ul.com
- European Atmospheres Explosives Directives (ATEX) - European Union, and many others
- International Electrotechnical Commission (IECEX) – Australia, Brazil, China, Singapore, Saudi Arabia, Thailand and many others - www.IECEX.ch/

Your company's safety engineer can help ensure you are evaluating products that can meet all your needs, on a global basis.

Determine the appropriate device category

The certification agencies classify hazardous locations according to how potentially explosive the atmosphere is, and define them according to a detailed scheme of Classes, Divisions, Groups and Zones. Equipment certified for operation in these environments is rigorously tested and rated according to the kind of protection it provides.

Handheld devices that will be used in environments in which ignitable concentrations of flammable gases, combustible dusts or ignitable fibers are likely to exist some or all of the time under normal operating conditions must be rated **Intrinsically Safe**. This is highest level of protection possible, making it the safest device choice.

A **Non-Incendive** device is designed for use in environments where the specified hazard may be present, but is not likely to exist under normal operating conditions.

Your company's safety engineer can specify which category and associated certifications are appropriate for your application. For more information on hazardous environment definitions, visit the UL website: www.ul.com/hazloc/define.htm

Define your technology needs

Consider the needs of your workforce, both today and in the future, so that you can specify a solution that can grow with your business. Do your users need to be able to send and receive data from both inside your operations, and out in the field? Are your maintenance or warehouse personnel using the device to perform scan-intensive operations? Do your applications require Terminal Emulation? The right device will meet both your safety and your business requirements.

The big picture

If your mobile computing needs extend beyond the hazardous environments in your enterprise, look for a supplier that can provide a range of integrated devices. With a single supplier and a family of solutions, you can reduce training and support costs and be assured of seamless integration. Consider also the supplier's longevity in the industry and dedication to building products specifically for hazardous environments.

Intermec Mobile Computers for Hazardous Locations

A full range of solutions to meet your needs.

CK3N NI Handheld Computer Non-Incendive (UL)



A broad range of data collection and communication features form the foundation for the Intermec CK3N mobile computer, enabling it to adapt to a variety of in-premise applications. With a Division 2, Class I - III non-incendive (UL) certification, the CK3N supports businesses in their pursuit to improve their operational performance metrics, simplify IT support and control operating costs.

Specifications

Operating System: Windows Mobile 6.1
Memory: 128MB RAM; 512MB Flash ROM
Environmental: IP54, 5 foot drop spec, -10° C to +50° C operating temperature

Certifications:

UL Listing (United States and Canada):
Division 2, Class I - Groups A, B, C, D
Division 2, Class II - Groups F, G
Division 2, Class III - T6

Communications: USB, RS232, Ethernet

Radio: 802.11 a/b/g, Bluetooth

Integrated Scanning Options: 1D linear imager, 2D area imager, 2D near-far, auto-focusing area imager

CK70 NI Handheld Computer Non-Incendive (UL)



The Intermec CK70 NI is the next-generation, ultra-rugged mobile computing solution with purpose-built design optimized for demanding courier express and parcel environments, enabling increased user efficiency for improved customer service and service-level-agreement compliance. With WWAN and 802.11 a/b/g/n real-time data collection capabilities in a variety of form factors, nearly indestructible keypad designs, unbeatable battery life, and onboard device health monitoring sealed in an IP67 enclosure for use in Division 2, Class I - III, non-incendive hazardous environments.

Specifications

Operating System: Windows Embedded Handheld 6.5.3
Memory: 512MB RAM; 1GB Flash ROM
Environmental: IP67, 2.4 m (8ft.) to concrete per MILSTD 810G, 1.8m (6 ft) to concrete across operating temperature range per MIL-STD 810G, 2,000 (1m) tumbles per IEC 60068-2-32 specification, -20°C to +60°C Operating Temperature (Max Ambient: 50°C T6)

Certifications:

UL Listing (United States and Canada):
Division 2, Class I, Groups A, B, C, D; T6
Division 2, Class II, Groups F; G T6
Division 2, Class III; T6

Communications: USB 2.0, RS232, Ethernet

Radio: 802.11 a/b/g/n, Bluetooth 2.1+EDR, CDMA Rev A or UMTS/HSUPA, GPS

Integrated Scanning Options: 2D area imager

CK71 NI Handheld Computer Non-Incendive (UL)



The Intermec CK71 NI is the no-compromise, next-generation ultra-rugged mobile computer that achieves true functional agility with the perfect balance of ruggedness, duty cycle, and ergonomics for the most demanding warehouse-distribution and manufacturing environments. With WWAN and 802.11 a/b/g/n real-time data collection capabilities in a variety of form factors, nearly indestructible keypad designs, unbeatable battery life, and onboard device health monitoring sealed in an IP67 enclosure for use in Division 2, Class I - III, non-incendive hazardous environments.

Specifications

Operating System: Windows Embedded Handheld 6.5.3
Memory: 512MB RAM; 1GB Flash ROM
Environmental: IP67, 2.4 m (8ft.) to concrete per MILSTD 810G, 1.8m (6 ft) to concrete across operating temperature range per MIL-STD 810G, 2,000 (1m) tumbles per IEC 60068-2-32 specification, -20°C to +60°C Operating Temperature (Max Ambient: 50°C T6)

Certifications:

UL Listing (United States and Canada):
Division 2, Class I, Groups A, B, C, D; T6
Division 2, Class II, Groups F; G T6
Division 2, Class III; T6

Communications: USB 2.0, RS232, Ethernet

Radio: 802.11 a/b/g/n, Bluetooth 2.1+EDR, CDMA Rev A or UMTS/HSUPA, GPS

Integrated Scanning Options: 2D area imager or Near/Far Area Imager

**CN3 and CN3e
NI Handheld Computer**
Non-Incendive (UL)



This fully rugged device offers a scanner and up to four wireless communications options, including WWAN, making it the ideal choice for companies that need to dynamically deploy the right resources to the right location, and enable real-time access for their remote mobile workers to tap into the information they need to work most effectively, even in harsh environments. Classified as a Division 2, Class I - III, non-incendive (UL) device, the CN3 NI doesn't know the meaning of downtime. A lightweight, PDA-like form factor - with options for larger keys to support gloved usage - completes this rugged field mobile device product offering.

Specifications

Operating System: Windows Mobile 5.0® or Windows Mobile 6.1
Memory: 128MB RAM; 256MB Flash ROM
Environmental: IP54 and IP64, 6 foot drop spec, -10°C to +50°C Operating Temperature

Certifications:

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

Communications: USB 1.1, RS232, Ethernet
Radio: 802.11 b/g, Bluetooth, CDMA Rev 0 or GSM/EDGE, GPS
Integrated Scanning Options: 2D area imager for scanning or image capture

**CN4H and CN4N
NI Handheld Computer**
Non-Incendive (UL)



An extension of the CN3 and CN3e product line, this rugged, hazardous certified device includes support of the 3G wireless WWAN technologies - UMTS/HSPA or CDMA Rev A. - to support simultaneous voice and data applications in potentially hazardous environments. Fully optimized for field mobile applications maximizing today's real time communications capabilities, this device is sealed to prevent dust from entering and classified for use in harsh environments requiring Division 2, Class I - III ratings.

Specifications

Operating System: Windows Mobile 6.1
Memory: 128MB RAM; 256MB Flash ROM
Environmental: IP64, 6 foot drop spec, -20°C to +60°C Operating Temperature

Certifications:

UL Listing (United States and Canada):
Division 2, Class I, Groups A, B, C, D; T6
Division 2, Class II, Groups F; G T6
Division 2, Class III; T6

Communications: USB 1.1, RS232, Ethernet
Radio: 802.11 b/g, Bluetooth, CDMA Rev A or UMTS/HSPA, GPS
Integrated Scanning Options: 2D area imager for scanning or image capture

**CN70 and CN70e
NI Handheld Computer**
Non-Incendive (UL)



The Intermec CN70 and CN70e are ideal for field-mobility applications that demand a compact form factor with no compromise on ruggedness. Next-generation architecture, combined with market-leading wireless communications and data capture capabilities, delivers optimal worker productivity. With WWAN and 802.11 a/b/g/n real-time data collection capabilities in a variety of form factors, nearly indestructible keypad designs, unbeatable battery life, and onboard device health monitoring sealed in an IP67 enclosure for use in Division 2, Class I - III, non-incendive hazardous environments.

Specifications

Operating System: Windows Embedded Handheld 6.5.3
Memory: 512MB RAM; 1GB Flash ROM
Environmental: IP67, 2.4 m (8ft.) to concrete per MILSTD 810G, 1.8m (6 ft) to concrete across operating temperature range per MIL-STD 810G, 2,000 (1m) tumbles per IEC 60068-2-32 specification, -20°C to +60°C Operating Temperature (Max Ambient: 50°C T6)

Certifications:

UL Listing (United States and Canada):
Division 2, Class I, Groups A, B, C, D; T6
Division 2, Class II, Groups F; G T6
Division 2, Class III; T6

Communications: USB 2.0, RS232, Ethernet
Radio: 802.11 a/b/g/n, Bluetooth 2.1+EDR, CDMA Rev A or UMTS/HSPA, GPS
Integrated Scanning Options: 2D area imager

CK321S Mobile Computer
Intrinsically Safe (UL)
Intrinsically Safe (ATEX)
Intrinsically Safe (IECEX)



The safest choice for mobile computing across multiple hazardous locations, the CK321S is designed from inception to meet the most stringent global requirements – not only for gases, liquids and vapors, but also for dusts, fibers and flyings. Its exceptionally rugged design enhances safety and ensures reliable performance in the harshest environments. With Windows Mobile 5.0® support and a full complement of wireless communications capabilities (802.11 b/g with Cisco® CCX v.3, Ethernet, Bluetooth® and WiFi®), the CK321S provides non-stop connectivity and safety.

Specifications

Operating System: Windows Mobile 5.0
Application Software: Factory loaded Intermec TE2000 terminal emulation
Memory: 128 MB RAM; 512 MB Persistent Storage
Environmental: IP67, 5 foot Drop Spec, -20°C to +50°C Operating Temperature

Certifications:

UL:

Gases, Liquids, Vapors:

Class I, Div 1, Groups A,B,C,D, T4
Class I, Zone 0, Group IIC, T4

Dusts & Fibers:

Class II Div 1, Groups E, F, G, T4
Class III Div 1

ATEX:

Gases, Liquids, Vapors:

Zone 0, T4, Group IIC

Dusts & Fibers: Zone 20 Group II, T250°C

Underground Mining: Group I M1

IECEX:

Gases, Liquids, Vapors:

Zone 0, T4, Group IIC

Dusts & Fibers: Zone 20 Group II, T250°C

Underground Mining: Group I M1

Communications: USB, Bluetooth, Ethernet

Radio: 802.11 b/g, Cisco CCX v3

Integrated Scanning Options: Linear Imager



Built to meet the most stringent standards. Yours.

Intermec Mobile Computers for Hazardous Locations

Intermec has 40 years of experience building supply chain solutions for demanding environments and we are committed to meeting the hazardous location computing needs of our customers on a global scale.

Rugged, Safe & Secure

Our mobile computers are built to stand up to the rigors of even the toughest applications. Drop specifications are based on industrial standards: units are drop-tested 26 times including all sides and corners. Plus, rugged features such as internal magnesium frames, laser-etched hard keycaps, and polycarbonate enclosures ensure safety and reliability without compromising productivity due to breakage.

We build the safest possible solutions for our customers. Our design engineers follow the changing global certification requirements closely, so that safety-enhancing features can be quickly incorporated into our products.

Intermec partners with Cisco Systems to deliver best-in-class wireless network infrastructure along with the Intermec complete line of ruggedized Cisco Compatible mobile devices and services. Working together ensures interoperability and superior end-to-end performance and security.

Easy to Deploy, Use & Support

Intermec mobile computers for hazardous locations combine superior design and ruggedness, the latest Microsoft Windows operating system technology and Intermec SmartSystems™ device management software making them easy to deploy, use and support. SmartSystems Foundation lets you manage all devices on the system – Intermec computers, printers, RFID components, software applications, bar code scanners and other peripherals – on-site or remotely from a single, centralized console. Administrators can change device settings, send OS upgrades, update software applications, and execute other changes directly from the console.

Aligned with Technology Leaders

Intermec helps you achieve the most return from your mobile computing and all your automated data capture investments. We do more than design and build the industry's most complete lineup of rugged, reliable and versatile equipment. We also work with you to understand your unique situation and then leverage our strong relationships with industry-leading partners including Cisco, SAP and Microsoft to help you create a total solution that harmonizes with your networks, platforms and processes.

Globally Supported

An international network of certified service and support partners in 70 locations worldwide provide peace of mind that your mission-critical operation will stay up and running when you need it most. In addition to localized support, Intermec offers a host of Medallion Service options, and access to manuals, downloads and 24-hour help from our online Knowledge Central database.

Intermec products for hazardous locations are complemented by a complete line of solutions and services for your supply chain

Mobile computing solutions
Mobile and fixed RFID systems
Scanning technology
Printers and media
Professional services
Wireless networks
Support services
Software tools and utilities

For more information, please visit www.intermec.com.



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