

Wearable Solution For Dolphin 70e Mobile Computer

There are lots of opportunities throughout the enterprise to increase efficiency and reduce labor costs using a hands-free computing solution: small parts picking, large package handling, sortation, truck loading... any time two hands are required. Until now, that has required the use of a dedicated wearable device and a redesign of the application and the process to utilize the limited user interface. Using the rugged, enterprise-class Dolphin™ 70e mobile computer with purpose-built wearable accessories provides a new approach to enabling hands-free operations. The large display, flexible touchscreen keypads and Microsoft® Windows® Embedded Handheld 6.5 architecture allow existing applications to be deployed hands free – without reengineering!

The lightweight wearable accessories provide increased comfort and improved hygiene over conventional wearables. The rubber watchband-style armbands stretch slightly as the arm moves, and therefore remain tight to prevent sliding down or spinning around the arm. The rubber materials do not absorb perspiration and are easily cleaned between shifts. All components are breakaway for safety and easily swappable for left- or right-hand operation. The system supports corded or Bluetooth®-connected ring scanners and provides a rugged audio interface to Honeywell headsets. All standard Dolphin 70e computer accessories, such as charging cradles and four-bay battery chargers, are available.

Several software enhancements have been incorporated to



A new approach to hands-free computing – get the benefits without the cost of reengineering your process or applications.

make use as a wearable device even more intuitive. Pairing the Bluetooth ring scanners is now as easy as scanning a single barcode. APIs are available that allow voice applications to optimize voice recognition performance and the user's audio experience. An integrated keyboard designer is included that allows creation of pop-up keypads that are appropriate for the operation at hand. The desired keypad can be invoked by the user using hot keys, by a local application using an API or by a Telnet host using special commands to the terminal emulation software. This provides for a context-sensitive keypad: Users see only the keys they need, when they need them.

FEATURES



Make the Dolphin 70e mobile computer hands free, without reengineering: Run your existing applications through a wearable solution without any rewriting.



Don't get stuck with a dedicated device that only serves one purpose. Share the Dolphin 70e mobile computer on different tasks between shifts, or standardize on one general-purpose device across multiple enterprise applications.



The 109.2 mm (4.3 in) large, clear display with capacitive touchscreen provides outstanding readability and plenty of space for data and keypads. Clearly superior to conventional wearable displays.



The use of touchscreen-based keypads and the integrated keyboard designer allow you to deploy just the keys that the user needs, only when needed. Can be controlled by a local application, hot keys or a Telnet host application.



The watchband-style armband improves comfort and eliminates hygiene concerns. The rubber watchband straps are comfortable, reduce sliding or rotating on the arm, and don't absorb perspiration. Easily cleaned.

Dolphin 70e Wearable Solution Technical Specifications

MECHANICAL

Dimensions (L x W x H):

Dolphin 70e with Standard Battery: 134 mm x 73 mm x 18 mm (5.3 in x 2.9 in x 0.7 in)

Dolphin 70e with Extended Battery: 134 mm x 73 mm x 23.9 mm (5.3 in x 2.9 in x 0.9 in)

Arm-Mounted Sled: 141 mm x 83 mm x 38 mm (5.6 in x 3.3 in x 1.5 in)

Corded Imager Ring Scanner: 50 mm x 30 mm x 30 mm (2.0 in x 1.2 in x 1.2 in)

Weight:

Dolphin 70e Standard Battery: 204 g (7.2 oz)

Dolphin 70e Extended Battery: 244 g (8.6 oz)

Corded Imager Ring Scanner: 71 g (2.5 oz)

Sled and Armband: 163 g (5.7 oz)

ENVIRONMENTAL

Operating Temperature: -20°C to 50°C (-4°F to 122°F)

Storage Temperature: -25°C to 70°C (-13°F to 158°F)

Humidity: 0 to 95% relative humidity (non-condensing)

Drop: Withstands multiple 1.2 m (4 ft) drops to concrete, all axes, and across operating temperature range (standard and extended batteries)

Tumble: Exceeds 1,000 (0.5 m) tumbles per IEC 60068-2-32 specification (standard battery) (not while in sled)

Exceeds 300 (0.5 m) tumbles per IEC 60068-2-32 specification (extended battery) (not while in sled)

ESD: ± 15KV Air and ± 8KV Contact

Environmental Sealing: Independently certified to meet IP54 standards for moisture and particle intrusion (IP67 outside of sled)

SYSTEM ARCHITECTURE

Processor: 1 GHz single core Texas Instruments OMAP

Operating System: Microsoft Windows Embedded Handheld 6.5

Memory: 512 MB RAM X 1 GB FLASH

Display: 109.2 mm (4.3 in) WVGA (480 x 800), super bright, sunlight viewable

Touch Panel: 2-finger capacitive touch, optically bonded for extra durability and better sunlight viewability

Keypad: Dedicated scan key, 4 programmable keys, volume up and down keys, side scan key, Honeywell Virtual Keypad™ and Keypad Creator™

Audio: Speaker, dual-array digital microphones with echo and noise cancellation

I/O Ports: Micro USB (not accessible while in sled); combo 3.5 mm microphone/headphone jack with supporting shroud and overmold

Camera: 5.0-megapixel camera with autofocus and flash (not accessible while in sled)

Sensors: Accelerometer, vibration, ambient light and proximity

Storage Expansion: User-accessible microSD slot (SDHC compatible). Please check with your Honeywell representative for available qualified card options.

Battery:

Standard: Li-ion 3.7 V, 1670 mAh

Extended: Li-ion 3.7 V, 3340 mAh

Hours of Operation:

2D Imager Ring, Standard Battery: 4 hours

2D Imager Ring, Extended Battery: 8 hours (scanning and sending data over WLAN every 10 seconds)

Integrated Decode Capabilities: Dedicated imager capable of decoding standard 1D and 2D barcode symbologies (not accessible while in sled)

Corded Ring Scanners: High-performance standard-range 2D imager

Development Environment: Honeywell SDK for Microsoft Windows Embedded Handheld 6.5

Honeywell Application Software: Honeywell Powertools™ and Demos, RFTerm and ETE Terminal emulations, Keypad Development tool suite, Context-Sensitive Keypad Deployment tools

Warranty: One-year factory warranty

WIRELESS CONNECTIVITY

WLAN: IEEE 802.11 a/b/g/n; Wi-Fi certified

WLAN Security: WEP, 802.1x, LEAP, TKIP, MD5, EAP-TLS, WPA-PSK, WPA v2.0, PEAP, CCXv4

WPAN: 2.4 GHz (ISM Band) Adaptive "frequency hopping" Bluetooth v2.0+EDR; Class 1.5, 10 m (33 ft) line of sight

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.

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Wearable Solution For Dolphin D75e Mobile Computer

There are lots of opportunities throughout the enterprise to increase efficiency and reduce labor costs using a hands-free computing solution: small parts picking, large package handling, sortation, truck loading... any time two hands are required. Until now, that has required the use of a dedicated wearable device and a redesign of the application and the process to utilize the limited user interface. Using the rugged, enterprise-class Dolphin™ 75e mobile computer with purpose-built wearable accessories provides a new approach to enabling hands-free operations. The large display and flexible touchscreen keypads allow much more user-friendly applications to be deployed, improving productivity. Often, an existing application will run without modification.

With a wearable solution based on a general-purpose computer like the Dolphin 75e, companies are not forced to invest in a dedicated device that serves only one purpose. The Dolphin 75e mobile computer can be used for different tasks on different shifts and across multiple applications throughout the enterprise. Finally, this solution offers both Microsoft® Windows® Embedded 8.1 Handheld and Android™ 4.4 operating systems, which support modern applications and development tools. A clear migration path is available for support of Windows 10 and Android 5, further future-proofing your investment.

The lightweight, wearable accessories provide increased comfort and improved hygiene over conventional wearables. The rubber



A new approach to hands-free computing – get the benefits of hands free without the issues of a dedicated-purpose device.

watchband-style armbands stretch slightly as the arm moves, and remain tight to prevent sliding down or spinning around the arm. The rubber materials do not absorb perspiration and are easily cleaned between shifts. All components are breakaway for safety and easily swappable for left- or right-hand operation. The system supports corded or Bluetooth®-connected ring scanners and provides a rugged audio interface to Honeywell headsets. All standard Dolphin 75e computer accessories, such as charging cradles and four-bay battery chargers, are available.

FEATURES



Enterprises can take advantage of the flexible support and migration of Windows Embedded 8.1 Handheld or Android 4.4 KitKat now, and seamlessly upgrade later as business needs grow to Windows 10 or Android 5.0L.



Don't get stuck with a dedicated device that only serves one purpose. Share the Dolphin 75e mobile computer on different tasks between shifts, or standardize on one general-purpose device across multiple enterprise applications.



The 109.2 mm (4.3 in) large, clear display with capacitive touchscreen provides outstanding readability and plenty of space for data and keypads. Clearly superior to conventional wearable displays.



Increase productivity and throughput with an ergonomic ring scanner based on an industry-grade imager that provides high-performance scanning of linear and 2D barcodes.



The watchband-style armband improves comfort and eliminates hygiene concerns. The rubber watchband straps are comfortable, reduce sliding or rotating on the arm, and don't absorb perspiration. Easily cleaned.

Dolphin 75e Wearable Solution Technical Specifications

MECHANICAL

Dimensions:

Standard Battery: 134 mm x 73 mm x 18 mm

(5.3 in x 2.9 in x 0.7 in)

Extended Battery: 134 mm x 73 mm x 23.9 mm

(5.3 in x 2.9 in x 0.9 in)

Arm-Mounted Sled: 141 mm x 83 mm x 38 mm

(5.6 in x 3.3 in x 1.5 in)

Corded Imager Ring Scanner: 50 mm x 30 mm

x 30 mm (2.0 in x 1.2 in x 1.2 in)

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ENVIRONMENTAL

Operating Temperature: -20°C to 50°C

(-4°F to 122°F)

Storage Temperature: -25°C to 70°C

(-13°F to 158°F)

Humidity: 0 to 95% relative humidity

(non-condensing)

Drop: Withstands multiple 1.2 m (4 ft) drops to concrete, all axes

Tumble: Exceeds 1,000 (0.5 m) tumbles per IEC

60068-2-32 specification (standard battery)

Exceeds 300 (0.5 m) tumbles per IEC 60068-2-

32 specification (extended battery)

ESD: ± 15KV Air and ± 8KV Contact

Environmental Sealing: Independently

certified to meet IP54 standards for moisture

and particle intrusion (IP67 outside of sled)

SYSTEM ARCHITECTURE

Processor: 2.26 GHz Qualcomm Snapdragon 801 quad-core

Operating System: Windows Embedded 8.1 Handheld, Android 4.4.4 KitKat

Memory: 2 GB RAM X 16 GB FLASH

Display: 109.2 mm (4.3 in) WVGA (480 x 800),

super bright, sunlight viewable

Touch Panel: Multi-touch projected capacitive touch, optically bonded for extra durability and better sunlight viewability, works with many off-the-shelf gloves and when wet

Keypad:

Windows Embedded 8.1 Handheld: Dedicated center scan button, back button, home button, volume up and down keys, power button, programmable triangle and circle buttons

Android: Programmable scan keys (center, left, right scan key), option to launch a user-selectable app

Audio: Speaker, digital microphone with echo and noise cancellation; focus on VoIP quality

I/O Ports: Micro USB, 3.5 mm headphone/microphone combo jack with supporting shroud and overmold

Camera: 8.0-megapixel camera with autofocus and flash with advanced software features for better image quality, not available while in sled

Sensors: Accelerometer, ambient light,

proximity, gyroscope, compass

Storage Expansion: User-accessible microSD

slot (SDHC compatible). Please check with your

Honeywell representative for available qualified

card options.

Battery:

Standard: Li-ion 3.7 V, 1670 mAh

Extended: Li-ion 3.7 V, 3340 mAh

2D Imager Ring, Standard Battery: 4 hours

2D Imager Ring, Extended Battery: 8 hours (scanning and sending data over WLAN every 10 seconds)

Integrated Decode Capabilities: Dedicated imager capable of decoding standard 1D and 2D barcode symbologies (not accessible while in sled)

Corded Ring Scanners: High-performance standard-range 2D imager

Development Environment: Honeywell SDKs for Android and Windows

Honeywell Application Software: Honeywell Powertools™ and Demos

Warranty: One-year factory warranty

WIRELESS CONNECTIVITY

WWAN: No WWAN configuration

WLAN: 1x1 IEEE 802.11 a/b/g/n/ac

WLAN Security:

Windows Embedded 8.1 Handheld: OPEN,

WEP, WPA2-PSK/Enterprise, PEAPv0/

MSCHAPv2, EAP-TLS, EAP-TTLS

Android: OPEN, WEP, WPA2-PSK/Enterprise,

PEAPv0/MSCHAPv2, EAP-TLS, EAP-TTLS and CCKM

WPAN: 2.4 GHz (ISM Band) Adaptive “frequency hopping” Bluetooth v4.0; Class 2, 10 m (33 ft) line of sight

NFC: Integrated NFC reader

Embedded Secure Element (Android)

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.

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