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 make use as a wearable device even more intuitive. Pairing the Bluetooth ring scanners is now as easy as scanning a single

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

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 I.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 bar code symbologies, please visit **www.honeywellaidc.com/symbologies**.

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