MOBILE COMPUTER

Intermec® **6640**

Features:

- **Built to withstand harsh environments**

- **Integrated wireless communications solutions with optional remote antenna switch**

- **SVGA all-light readable display**
    - **– 10.4" Color or**
    - **– 9.8" Monochrome**

- **Intel® MMX Pentium Processor@266MHz**

- **Pentium II Upgrade**

- **32MB RAM, expandable to 128MB**

- **3GB hard disk drive, expandable to 6GB**

- **96MB or 256MB solid state drive, optional**

- **Windows® 98 operating system**

- **Type II and Type III PC card slots available**

- **Integrated GPS receiver, optional**

- **Integrated Ethernet**

- **Integrated USB**

- **Flexible, user selectable I/O connector panel**

- **Complete line of peripherals and accessories**

The Ultimate Solution

The Intermec® 6640 industrial mobile computer combines ruggedized portability with Pentium PC performance. It provides a platform for the latest Windows® applications and maximum power in a mobile, pen-based unit. The large, easy-to-read displays offer the option of all-light readable full-color or monochrome viewing.

Powerful Portability

The Intermec 6640 weighs just six pounds, yet features a powerful 266MHz Pentium MMX processor which is upgradeable to a Pentium II. This compact unit gives the user the functionality of Windows® 98 in a portable device that is built to withstand heavy day-to-day outdoor use.

Advanced Communication Capabilities

The Intermec 6640 is designed to incorporate the options that are best suited to your needs — whether wired or wireless, WANs or LANs. Wireless radios and GPS receivers can be easily integrated into the 6640, and they will be properly power managed and sealed within the unit. A unique remote antenna switch capability provides the option of changing from the 6640's local antenna to a greater-range external antenna.

A Smart Investment

The Intermec 6640 is designed with flexibility and the future in mind. The integrated USB port allows connection to an ever-growing list of peripheral devices. The connectors on the tablet are provided through a changeable I/O panel. RAM memory and hard drive capacity can be easily increased. And even the processor can be upgraded to an Intel® Pentium II.

Driving Business with Mobile Computing

The Intermec 6640 lets you place the power of information in the hands of your frontline workers, and is the latest in a long line of products from Intermec that can help you drive business with mobile computing.

Intermec

Intermec® **6640**

WAN/LAN Communications

Wireless connectivity is provided by integrating Wide Area Network radio modules for the Mobitex, CDPD or GSM systems, thus leaving the two PC card slots available for the 2.4GHz Local Area Network radio and other PC card options. In addition, the radios are power managed to maximize the battery discharge cycle in the mobile environment.

Internal cabling utilizes the "local" antennas mounted on the 6640 and "remote" mounted antennas, via the optional integrated remote antenna switch. All of the optional radios are available through the sealed access door on the rear of the 6640.

Connectivity

The 6640 has a unique Input/Output panel on the top of the unit for peripheral connectivity.

Since most users have specific connector requirements for their particular system, the I/O panel can be selected to contain 2 or 3 of the more popular I/O connectors. There are currently three I/O panels offered:

I/O Panel 1: PS/2, RJ45 & DB9
I/O Panel 2: RJ11, RJ45 & DB9
I/O Panel 3: DB25 & Audio Headset

In addition, a dedicated USB (Universal Serial Bus) connector is located on the upper right side of every 6640.
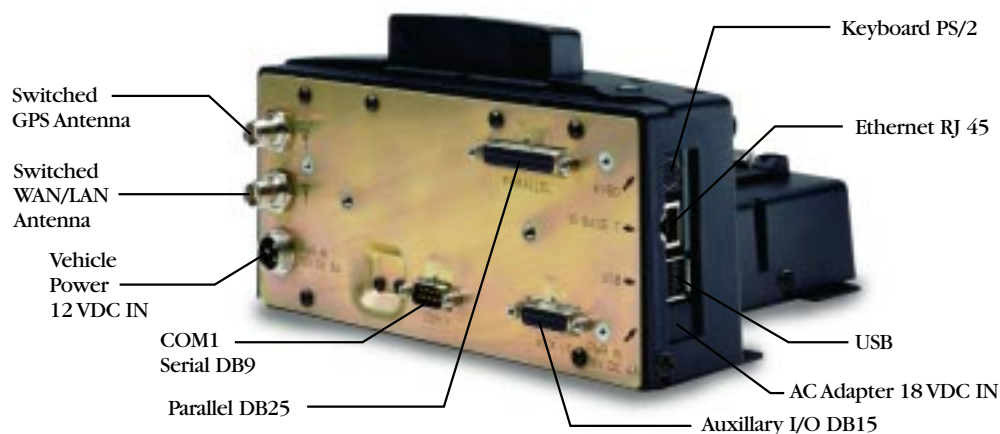
Capacitive Touch Panel

The 6640 is equipped with the latest in capacitive touch panel technology. This touch panel consists of a top layer of hardened glass with an embedded conductive layer behind it that is connected to a controller circuit.

The controller can sense the presence and location of a minute current flow through the glass from the pen tip.

The wired tether completes the circuit from the pen back to the controller circuit. A finger may also be used but will always be overridden by the pen, which is the preferred method of interfacing with the touch panel.

Intermec® **6640** Docking System

Switched GPS Antenna

Switched WAN/LAN Antenna

Vehicle Power 12 VDC IN

COM1 Serial DB9

Parallel DB25

Keyboard PS/2

Ethernet RJ 45

USB

AC Adapter 18 VDC IN

Auxiliary I/O DB15

Full Featured Dock
(bottom view)

Dock Ruggedness

To achieve maximum product life of the 6640 and its dock, both have been equipped with a gold-plated surface-contact mating connector. This will alleviate unnecessary wear-and-tear to the respective docking contacts. The use of surface contacts also eliminates potential alignment problems, as experienced with multi-pin connectors.

The positive and negative power input docking connectors are actually two large gold-plated pin connectors that not only handle the required DC operating/charging current for the docked computer, but also act as guide pins for the antenna connectors when the dock's front push-bar is engaged.

Intermec® **6640** Docking System

	Serial 9 pin D-sub	Parallel 25 pin D-sub	USB 4 pin	Auxiliary I/O 15 pin	PS/2 6 pin DIN	Remote Antenna TNC	Input Power 1 pin	Input Power 3 pin	Ethernet RJ45
6640 Vehicle Dock Configurations	Serial 9 pin D-sub	Parallel 25 pin D-sub	USB 4 pin	Auxiliary I/O 15 pin	PS/2 6 pin DIN	Remote Antenna TNC	Input Power 1 pin	Input Power 3 pin	Ethernet RJ45
Basic-featured	1	–	1	–	1	Optional	–	1	–
Full-featured	1	1	2	1	1	Optional	–	1	1
6640 In-premise Dock Configurations	Serial 9 pin D-sub	Parallel 25 pin D-sub	USB 4 pin	Auxiliary I/O 15 pin	PS/2 6 pin DIN	Remote Antenna TNC	Input Power 1 pin	Input Power 3 pin	Ethernet RJ45
Basic-featured	–	–	1	–	1	Optional	1	–	1
Full-featured	1	1	2	1	1	Optional	1	–	1
6640 Port Expander	Serial 9 pin D-sub	Parallel 25 pin D-sub	USB 4 pin	Auxiliary I/O 15 pin	PS/2 6 pin DIN	Remote Antenna TNC	Input Power 1 pin	Input Power 3 pin	Ethernet RJ45
	1	1	2	1	1	–	1	–	1

Dock Configuration Table

Engaging the dock's front push-bar and its locking mechanism in turn engages these power pins into the docked computer. This keeps the computer and the corresponding dock connector contacts firmly seated against each other for reliable mechanical and electrical connections. In addition, the dock connector assembly is allowed to float with the computer, thus eliminating stresses on the pins, despite vehicle vibrations.

Docking Solutions

The Intermec 6640 mobile computing system offers a series of compact and versatile docks for both vehicular and in-premise mounted installations. Each dock can also be selected with a basic or full-featured I/O connector configuration. The I/O mix for the various dock versions is defined in the 6640 dock configuration table and provides maximum configurability and easy system expansion.

The design and installation of the actual vehicle pedestal mounts for various vehicles are provided by third party vendors who are specialists in this field. Intermec maintains a list of these third party vendors, which is available from your sales team. Intermec also offers various mounting adapter plates that allow installation of the Intermec 6640 docks to these pedistal mounts, if required.

Unique Remote Antenna Switch

The Intermec 6640 dock also features a remote antenna switch option, which transparently switches the 6640 integrated radio from the unit's local antenna to a remote mounted vehicle antenna.

The remote antenna mounted outside the vehicle provides greater radio range than the local antenna operating from within the metal vehicle cab. This, in turn, ensures that valuable information is not lost during data transmission due to loss of the radio signal.

Auxiliary Input/Output Port

The integrated design characteristics of the Intermec 6640 and its docking station make this a truly unique solution. That is, the 6640 computer always knows when it is docked or undocked so that it can control such critical functions as battery charging and the optional remote antenna switch.

Additional system status information is available for system developers/integrators through the auxiliary input/output port. The Intermec 6640 15-pin Aux I/O port has four general purpose digital output (control) signals and four general purpose digital input (monitor) signals that can be utilized for such tasks as controlling and monitoring external circuits.

Intermec® **6640**

Physical Characteristics

Length: 24.1cm (9.5")
Width: 30.5cm (12.0")
Depth: 5.3cm (2.1")
Weight: 2.7kg (6.0lbs) with battery

Environment

Operating Temperature:
-20° to 50° C (-4° to 122° F)
Storage Temperature:
-30° to 70° C (-22° to 158° F)
Relative Humidity:
90% (non-condensing)
Rain Resistance: IEC 529,
IP53 classification

Operating System

Windows® 98

Microprocessor

Pentium MMX@266MHz, upgradeable to
Pentium II@333MHz

Memory

32MB RAM standard
Upgradeable to 64MB/128MB

Internal Storage

3GB Hard Disk Drive Standard
Upgradeable to 6GB HDD or larger
96MB or 256MB solid state drive, optional

PC Card Slots

1 Type II
1 Type III
Radios are integrated serial modules,
so they do not use PC card slots

Display

800 x 600 resolution
Monochrome: 9.8" SVGA
Color: 10.4" SVGA, all light readable

Power

Intelligent LiION battery with fuel gauge
Hot-swappable during suspend mode
AC adapter
Auto adapter
Single Pack Charger

Keypad

Integrated function keys at base of
touchscreen

User Interface

Capacitive stylus

Connectivity

USB
I/O panel*
    – Parallel DB-25
    – Serial DB-9
    – Ethernet RJ-45
    – Modem RJ-11
    – Audio headset (1/8")
    – PS/2 keyboard
    *Up to 3 connectors per panel
     User selectable from factory
     Service center changeable

Communications/Navigation

GPS
CDPD
Mobitex
GSM
Integrated Ethernet
Wireless LAN
Landline modem

Accessories

AC adapter
Auto adapter
Carrying case
Shoulder strap
Single pack charger

Model

Vehicle/In-premise Docks
    –Basic feature vehicle
    –Full feature vehicle
    –Basic feature in-premise
    –Full feature in-premise
Port Replicator
    –Compact
    –I/O Port
    –Power Input

Physical Characteristics

Length: 21.6cm (8.5")
Width: 10.2cm (4.0")
Height: 20.3cm (8.0")
Weight: 1.8kg (4.0 lbs)

Regulatory Approvals

FCC, Class B; UL1950; CUL; CISPR; CE Mark

Hardware Evaluation Kits and Software Developer's Tool Kits

Hardware Kit includes:
    – Basic 6640 with battery
Software Kit includes:
    – Tool kit CD
    – Technical documentation

Warranty

1 year, extended warranty available

Note

Some approvals and features may vary by country and may change without notice. Specs may vary based upon the specific configuration or features selected. Please check with your local Intermec sales office for further information.

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