Minec 4x

Made to hold

- √ Held and operated by ONE hand
- √ Online data access via GSM/GPRS, WLAN and Bluetooth
- √ Rugged design — IP 65 rating
- √ Windows CE or Linux
- √ RFID, barcode scanning and more

www.minec.com

MINEC®

We make data collection easier

Unique combination of features speeds data collection, communication and synchronisation

Rugged design
Water splash and dust resistant to IP-65 rating, shock resistant, for industrial use.

Ergonomic
Low weight, can be held and operated by one hand

Big Graphical Display
Backlit, easy-to-read, up to 20 lines x 30 character display. Adjustable contrast.

Windows CE or Linux
Choice of Operating System for compatibility and integration with existing system and programs.

Configurable LEDs
Green and red diodes indicate terminal operating mode and data registration status. Configurable to applications.

Compact Flash Cards
A slot for Type I and II Compact Flash card for extra memory, Wireless LAN or Bluetooth giving real-time communication.

Multifunction Button
Scan button scans barcodes or RFID-tags and is also cursor controller.

Backlit Keypad
Alphanumeric, 27 keys, backlit. Letters entered by pressing two adjacent keys. Keypad is superior to pen data-entry in many situations.

Optional built-in GSM/GPRS phone
For data and voice communication

Power saving on/off button
Three-way ON/OFF button, on/sleep/off.

IrDA
For cordless data transfer to an IrDA-equipped printer, PC or other device.

Jacks
For hands-free headset and DC cable from mains or car battery charger.

Modules to suit your needs

By installing the appropriate peripheral module, each Minec 4x hand-held terminal is configured to suit your particular data collection and communication requirements. The integrated read/write module is chosen from a wide range of alternatives.

Minec 4x

is designed for keypad data entry with batch collection or real time communication. Available with an optional RS232 connector.

Minec 4x Laser

has a laser scanner which reads barcodes at distances from 5 to 70 centimetres. Scans and decodes all common barcodes.

Minec 4x RFID

is available in configurations to read and write low and high frequency tags from Philips Semiconductors, Texas Instruments, Tagsys, EM Marin and others.

Minec 4x MIFARE

reads and writes contactless smart cards based on MIFARE technology from Philips.

Minec 4x Laser/RFID

The 4x Laser/RFID module has a barcode and RFID scanner and is designed for situations where data comes from a wide variety of sources.

Docking cradle

A docking cradle (optional) for IrDA data transfer (115 kbs) from terminal to cradle and battery charging.

Using the Minec 4x in terminal mode

As Minec 4x supports WLAN and GSM/GPRS, users can create and run applications on the host. Web solutions are supported through a Windows CE browser.

Minec 4x - also a mobile office

With the GSM/GPRS telephone and Windows CE installed, mobile workers can use the Minec 4x as a mobile office. Wherever they are they can stay updated on any information in the remote database, such as stock situation, customer information, valid pricing and much more. Internet access and voice communication are all available.

Low know-how costs

The Minec 4x runs on a standard program platform, which means there is no new system to learn, no high know-how threshold. The Minec 4x is easily mastered and quickly becomes a highly-productive tool. Program development is done using standard tools, such as Visual Basic and C++.

Minec 4x for low total cost of ownership

Technical Specifications

Display
Graphical display.
240 x 160 pixels, max 20 lines of 30 characters.
8 lines of 20 characters at default cell size.
Monochrome transflective EL backlit LCD screen, adjustable contrast.
Active viewing area 58 x 38 mm.

Keyboard
27 rubber keys.
Scan key is also cursor control key.
Backlit keyboard as standard.
Alpha characters entered by pressing two adjacent keys.

Size and Weight
Standard version (no reading module).
L: 225 mm (8.86").
H 25 mm (0.98") (display 45 mm (1.77").
W: 58 mm (2.28") (display 85 mm (3.35").
Weight 310 grammes (11 oz) incl. battery.

Operating temperature
-20ºC (-4ºF) to +55ºC (131ºF).

Storage temperature
-30ºC (-22ºF) to +60ºC (140ºF).

Terminal rating
IP65 standard for moisture and dust resistance.
Withstands drop from 1.2 meters (4') on concrete.
LVD: EN60950.
EMC: FCC Part 15 Class B, EMC Directive 89/336/EEC.
Laser: CDRH/IEC Class II.

CPU
NEC VR4181 at 66 MHz.

Operating System
Windows CE or Linux.

Application Development
Under Windows CE: C++ or Visual Basic.
Under Linux: C++.

Memory
SDRAM 16 MB containing
disk and executing area.
FLASH 16 MB containing
disk and operating system.
FLASH can be erased and programmed in the system.
Memory can also be expanded using Compact Flash cards.

Sound
Internal buzzer, programmable frequency and duration.

Clock
Real-time clock with alarm.

Power Supply
Li-Ion battery pack 3.7 V. 1800 mAh.
Operation 8 hours a day for up to one week, depending on application.
Multistage "low battery" warning.

Input/Output
Communication via IrDA (115 kbps).
Wireless LAN IEEE.802.11(b), Ethernet or Bluetooth™ via optional Compact Flash card slot.
Optional dual-band GSM/GPRS telephone for data and voice communication.
Optional RS232 module.

Peripherals
— Docking cradle with RS232 connection and battery charger. USB available as an option.
— Standard printers and modems can be connected via the docking cradle.
— Optional Docking Cradles can be connected in daisy chain.

Modules
Modules for reading/writing and communication are available:
— Laser barcode scanner.
— RFID, read/write different tag/transponder types (125 kHz, 13.56 MHz).
— RS232 communication port.
— MIFARE.
— Combinations of the above modules.

Warranty
Every Minec 4x terminal carries a twelve month warranty.

Minec 4x for demanding applications and harsh environments.

Minec manufactures hand-held data collection terminals for a wide range of mobile data collection situations.

Minec terminals, software and support, are available worldwide through local distributors who are specialists in barcode, RFID and hand-held data collection systems or directly from Minec in Sweden. For the address of your nearest distributor, contact Minec or visit www.minec.com.

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