

Memor2000 -
the ergonomic
hand-held
terminal users
prefer.

Memor2000





Design features

Memor2000 has been designed for true single-handed operation. It is lightweight and of rugged construction, and its size, shape and balance are optimized. With no sharp edges it fits perfectly into the user's hand. The Memor2000 provides a positive tactile response.

All keys are positioned within easy reach of the operator's thumb, and letters are entered without using the shift key. By pressing two adjacent keys simultaneously, an alphabetical character is generated. The large, clear full graphic display is angled towards the user to achieve the best possible legibility.

The Memor2000 is a comfortable hand-held terminal designed with the user's needs firmly in mind.



Peripheral modules

The Memor2000 is a highly-versatile modular terminal. The keypad and display are the same on all models. The integrated read/write module is chosen from a wide range of alternatives to meet your specific data capture requirements. The integrated module, which can contain a laser scanner, barcode wand or RFID reader/writer, for example, is exchangeable.



Software

The Memor2000 uses a DOS-like operating system, M/2-DOS. Application software is developed on a PC in the C/C++ language. There is no need to cross-compile, developed programs can be downloaded directly into the Memor2000. An application generator is available for non-programmers.



Cordless communication

With the Memor2000 in its communication cradle, the built-in IR-link provides cordless communication with, for example, PCs, modems or printers.

A Memor2000 terminal for your specific data collection needs.



Memor2000 Basic

The standard Memor2000 handheld terminal is comfortable in the hand and weighs just 200 grams. The large four-line display is easy to read and has full graphics capability. There is also a contact for connection to a PC, modem, printer or other external equipment.



Memor2000 Mifare

The Memor2000 MIFARE terminal reads and writes to contactless smart cards based on MIFARE technology from Philips. Reading distance up to 20 mm.



Memor2000 Laser

The Memor2000 Laser has a built-in laser scanner and can read barcodes at distances from 5 to 70 centimetres. It correctly scans and decodes all the most commonly used barcodes.



Memor2000 ToM

The Memor2000 ToM has an integrated reader and writer for button tags. Button tag touch memories are small devices similar to coins with an internal memory for information storage. The Memor2000ToM can operate button tags with memories up to 64 Kbit.



Memor2000 IBW

The Memor2000 IBW (Integrated Barcode Wand) is designed for both manual entry of data and data collection from barcodes. It eliminates the need for a separate barcode pen reader with a cord that can get tangled and twisted.



Memor2000 Laser/IrDA

The Memor2000 with an integrated laser scanner and IrDA communication interface uses infrared light for the cordless transmission and reception of data to and from PCs, printers, GSM cellular phones and other products equipped with an IrDA interface.



Memor2000 RFID

The Memor2000 RFID is available with many different configurations, supporting the reading and writing of low and high frequency tags such as Tag-it and I-Code smart labels. Reading distance up to 70 mm.



Memor2000 RF

The Memor2000 RF has a built-in radio transceiver which communicates with the host system through one or several base stations on 433 MHz frequency. The range of each unit is up to 250 meters.



Memor2000 RFID/Laser Combination

The Memor2000 RFID/Laser combination model reads and writes contactless RFID-tags as well as reads barcodes. The RFID/Laser combination automatically detects tag type with reliable RFID performance up to 70 mm.



Memor2000 GSM

The Memor2000 GSM has a built-in GSM-phone for data communication. It allows data to be transferred at speeds up to 14400 bps over the existing GSM network. Voice communication is supported through a headset. Six lines display as standard.

Technical Specification

PHYSICAL CHARACTERISTICS

Display

4 lines with 20 characters per line at default cell size. 6 lines available as an option.

LCD supertwist.

Active viewing area 56.35 mm x 20.75 mm.

Dot size 0.42 mm x 0.60 mm.

Dot pixels 120 dots x 32 dots.

Cell size 8 x 6 pixels, at default cell size.

Full graphic capability.

Keyboard

With 27 coated rubber keys.

Alpha characters entered by pressing two adjacent keys.

Size and Weight (basic model)

L: 186 mm H: 27 mm (H: 31 mm display)

W: 52 mm (W: 77 mm display)

200 grams incl batteries

Operating temperature

-10°C to +45°C

Storage temperature

-20°C to +55°C

Other

Withstands a drop from 1,2 meter onto concrete.

Conforms to EN 50 081-1 and EN 50 082-1.

OPERATING CHARACTERISTICS

CPU

NEC V25 at 8 Mhz (instruction compatible with Intel's 8088)

Operating System

M/2-DOS

Memory

SRAM 256KB--1MB containing disk and executing area.

3-year battery back-up on all RAM

FLASH 256 KB containing disk and operating system.

FLASH can be erased and programmed in system.

Power supply

2 AA/R6 Alkaline battery (rechargeable batteries as an option).

3 to 4 weeks operation in normal use.

Power consumption in operation is approx 15 mA (without barcode reading device).

Battery is field replaceable without loss of data.

Multi stage "battery low" warning system.

Sound

Internal sounder, programmable frequency and duration.

Clock

Real time clock with alarm feature.

Input/Output

Built in IR-link, serial channel COM1:, normally 19.200 BPS, for connection to communication cradle.

MiniDIN 8 pin connector (option) COM2:, normally 19.200 BPS, for connection to modem, external barcode reading device, printer and PC. Input RS232 levels. Output 0-5 V CMOS levels.

SOFTWARE

Software development

By using a Borland C/C++ compiler, application programs can be fully developed and tested on an ordinary PC. The resulting program is downloaded to the Memor2000 where it can be stored on the RAM-disk or on the FLASH-disk.

Application generator

An application generator (MPG) is available for the non programmer. With this tool users can easily develop application programs just by defining display pictures and keyboard functions. The MPG is run under Windows on a PC.

Communication

Communication solutions are available for all types of systems, for example the well-proven communication program Minec Communication Server (MCS)

Barcode

Memor2000 offers decoding routines for all common types of barcodes.

MS-DOS is a trademark registered of Microsoft Corporation.
Tag-it is a registered trademark of Texas Instruments.
I-Code and MIFARE are registered trademarks of Philips Electronics N.V.
Patent pending

Technical specification Memor2000 Laser

Light Source

Visible laser diode, 670 +/-10 nm

Optical Resolution

Element width minimum 0.12 mm

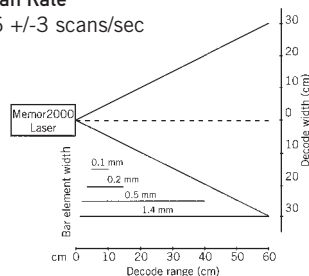
Ambient Light

Artificial: 4.800 lux

Sunlight: 86.000 lux via indirect exposure

Scan Rate

36 +/-3 scans/sec



Minimum Print Contrast

20% absolute dark/light reflectance at 670 nm

Orientalional Tolerance

Pitch +/-55°

Skew +/- 65°

Size and Weight

L: 186 mm H: 27 mm (H: 38 mm display)

W: 52 mm (W:77 mm display)

260 grams incl batteries

Minec Systems reserves the right to change these specifications without notice.
Effective June 2001.