**Memor2000 the hand-held terminal with processing power. Download registers and process data in custom applications.**

# Memor2000 RFID

## 13,56 MHz solutions

Fully integrated RFID read/write functionality for Tag-it and I•Code smart labels.

### Memor2000 RFID for Tag-it and I•Code

The Memor2000RFID hand-held terminal reads and writes to Tag-it (Texas Instruments) and I•Code (Philips Semiconductors) smart labels. Smart labels employ radio frequency identification (RFID) technology. Each printable and flexible label is a transponder with an integrated circuit and an antenna. The label does not require a battery as it receives energy together with information from the Memor2000 read/write module at distances of up to 70 mm.

Fully integrated RFID read/write functionality for MIFARE.

### Memor2000 RFID for Gemplus

Fully integrated RFID read/write functionality for high frequency 13,56 MHz tags, from Gemplus.

### Memor2000 RFID for MIFARE

The Memor2000 MIFARE terminal reads and writes to "contactless smart cards" based on MIFARE technology from Philips. The operating distance is up to 15 mm. The card, which has a memory capacity of up to 64 kbits, takes its power from the radio field produced by the reader. MIFARE offer a high level of security, which makes them particularly suitable for electronic cash, smart ticketing and ID-systems. Data communication between the reader and the card is encrypted.

Fully integrated RFID/Laser combination

### Memor2000 RFID/Laser

The Memor2000 RFID/Laser combination model reads and writes contactless RFID as well as read barcodes. Barcode users can retain existing barcode systems at the same time as they phase in RFID tags with their unique advantages. Parallel use of barcode and tags would otherwise require two separate hand-held terminal systems to read/write data. The RFID/Laser combination has a reliable RFID performance up to 60 mm, and also decodes all common types of barcodes. The operating distance for barcode reading is up to 50 cm.

MINEC

We make data collection easier

# Everything you need to get started with RFID data collection. A complete Start-up Kit.


- Memor2000 RFID hand-held terminal
- Memor2000 DS-S Docking Station
- Cable
- Software Development Package - Communication Tool
- Software Documentation

## Technical Specification Memor2000

**PHYSICAL CHARACTERISTICS**

**Display**
4 lines with 20 characters per line at default cell size. 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**
L: 186 mm H: 27 mm (H: 31 mm display)
W: 52 mm (W: 77 mm display)
235 gram (8 oz) incl batteries

**Operating temperature**
-10°C to +45°C

**Storage temperature**
-20°C to +55°C

**Other**
Withstands drop from 1,2 meter (4') onto concrete.
Conforms to EN 50 081-1 and EN 50 082-1.
Comply with the limits for a class B digital device, pursuant to part 15 of the FCC rules.

**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.

**Sound**
Internal buzzer, programmable frequency and duration.

**Clock**
Real time clock with alarm feature.

**Power supply**
2 AA/R6 Alkaline battery or rechargeable batteries as an option.
3 to 4 weeks operation in normal use.
Battery is field replaceable without loss of data.
Multi stage "battery low" warning system.

**Input/Output**
Built in IR link, serial channel COM1:, normally 19.200 BPS, for connection to communication cradle.

**Peripherals**
- Docking station (CCIR) with RS232 and RS485 connections.
- Docking station (DS-S) with 2xRS232 connections and battery charging
- Both models cordless IR connection with the handheld.
- Standard printers and modems can be connected via docking stations.

**SOFTWARE**

**Software development**
By using a Borland C/C++ compiler, application programs can be fully developed and tested on a standard PC. The resulting program is downloaded to 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 runs on a PC.

**Communication**
Communication solutions are available for all types of systems. Well proven solutions for DOS, 16-BIT Windows and 32-BIT Windows.

**Minec Systems reserves the right to change this specification without notice** **Effective June 1999**



MINEC SYSTEMS, BOX 7278, SE-187 14 TÄBY, SWEDEN, TEL +46 (0)8-630 92 92, FAX +46 (0)8-630 05 07, INFO@MINEC.SE, WWW.MINEC.SE