MT15

Portable Data Collection Terminal

Features

- Ergonomic design, extremely compact and light
- DOS operating system
- Programmable in "C" language through the most widespread commercial compilers
- Large memory capacity
- Numeric and alphanumeric keyboards available
- Bi-directional communication through optic interface or integrated serial port
- Stand-alone configuration available

Applications

- Goods shipping/receiving
- Inventory control
- Order picking and entry
- Meter reading
- Market research and statistics
- Work-in-progress control
- Laboratory data collection
- P.O.S. data collection

General Description

The portable terminal market for data collection in off-line applications is constantly seeking new solutions able to offer increasingly higher performance, maximum standardisation and flexibility. For this reason Datalogic is expanding its own terminal range with the introduction of the **MT15**.

The **MT15** is a powerful portable computer which guarantees high performance through its high speed elaboration and processing capabilities. Data can be introduced via keyboard, available in numerical and alpha-numerical versions or via direct connection to any Datalogic manual bar code reader.

The **MT15** is extremely compact and light, hence easy to handle and practical to use. It features an internal architecture which is open to the universally renowned and widespread world of the portable computer. Its DOS operating system, in unison with the available development system, enables application programs to be developed in 'C' language exactly as if it were a normal P.C., using all the most widespread commercially available compilers.

Extreme flexibility is provided by the choice of memory available. An additional RAM-disk of 1 or 2 MBytes can be added to the basic version which offers 1 Mbyte of RAM divisible in various ways between working RAM and RAM-disk.

The user can further benefit from the high battery autonomy which ensures **MT15** terminal functioning for an entire day of intense work before re-charging is required. Both data transmission and battery re-charging can be carried out via optical interface through the OM10 base. As an alternative, the **MT15** can also be used in stand-alone configuration: in this case, data transmission occurs via the terminal serial port while the battery recharging supply is obtained via the proper integrated connector.

DATALOGIC

Technical Description

Datalogic's MT15 is a powerful portable computer based on a 16-bit V40 microprocessor and equipped with real time clock.

The terminal has a flash memory of 512 KByte, 360 Kbyte of which are devoted to emulating the floppy disk A: which is the exact equivalent to the boot disk of a personal computer. DOS files including AUTOEXEC.BAT and CONFIG.SYS are pre-loaded onto disk A:. The basic RAM memory is 1 MByte, divided into working RAM used by the DOS, and RAM-disk to load data and customised application programs (equivalent to the C-disk of a personal computer). Such division can be set up by the user according to the particular application requirements. The maximum RAM value assigned to the DOS is 640 KByte, correspondingly a 256 KByte RAM-disk is obtained. On the contrary, the DOS memory area can be limited down to 203 KByte, thus giving a RAM-disk of 768 KByte. Obviously, all other intermediate configurations of RAM and RAM-disk are possible in blocks of 128 KByte at a time. The dimensions of the RAM-disk can also be amplified from the base memory by introducing an additional card of 1 or 2 MBytes.

The operating system is Novell Netware Palm DOS 1.0 which is equivalent to DR-DOS 5.0 and MS-DOS 3.31. To facilitate configuration and system command execution operations, a menu-driven program with graphic interface is available. This program allows all these functions to be accessed, reducing digitation errors of incoming data to a minimum.

Via the DSD-O9 development system, application programs on the PC can be created in 'C' language using the most widespread commercially available compilers. Programs realised in this way are then transferred onto the MT15 RAM-disk: it is possible to display the list of programs available on the RAM-disk and select the one required. In addition, a special program, the "application generator", is available. It is completely configurable by the user and offers a multitude of possibilities for database management. This program also features a level of security via password, whereby it blocks any non-qualified operator from modifying the configuration, and only allows access to the current database.

The MT15 features a backlit graphic display with a matrix of 120 x 32 pixel or 4 x 20 characters and can therefore be set up to display very large characters or any type of graphic information.

The keyboard consists of 23 keys which include all alphanumerical characters and function keys. It is available in the two following versions: numerical, for applications which require frequent input of numerical characters or frequent

System Configuration

Stand Alone

Stand Alone via OM10

Multidrop
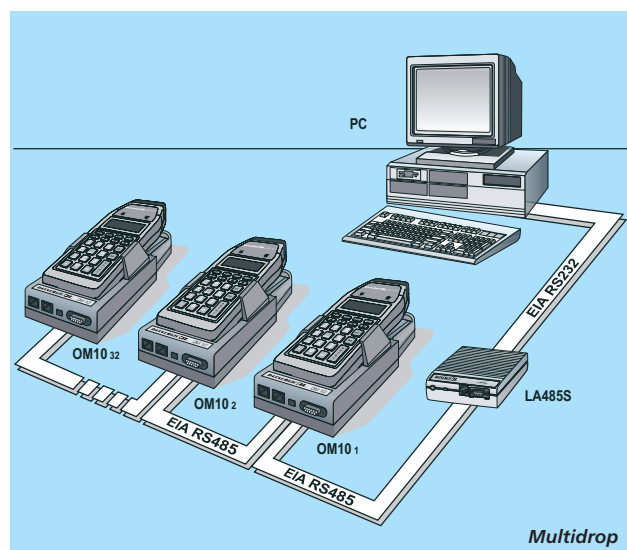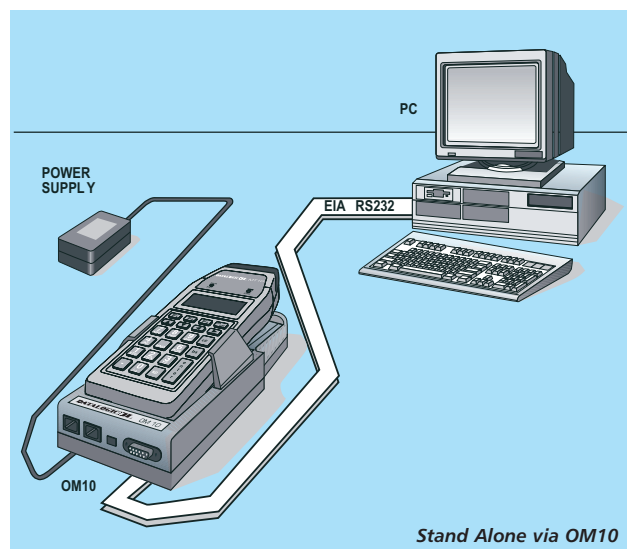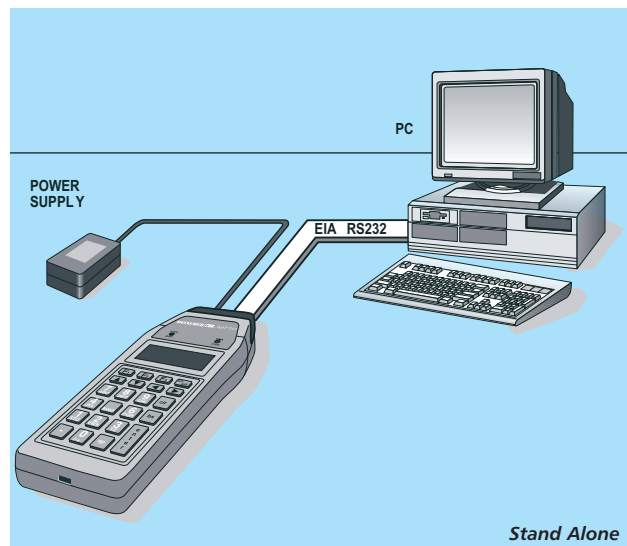
Applications

Technical Description (continued)

cursor movements and alpha-numerical, for applications requiring frequent input of alpha-numerical characters.

The MT15 is equipped with 700 mA/h Ni-Cd batteries which are internally re-chargeable by magnetic induction via the OM10 cradle, or, in the stand-alone configuration, through the proper supply connector situated on the upper part of the terminal. In addition, the batteries can also be re-charged separately, via a specific slot present on the OM10 or using the CB10 multiple charger which enables up to 6 batteries to be re-charged simultaneously.

The data back-up function is guaranteed by 3V Lithium batteries.

The MT15 can be connected to any bar code reader (pen, CCD or laser gun) via the bar code port also present on the upper part of the terminal.

The internal decoder is able to manage all the most frequently used bar codes such as: 2/5 interleaved, 2/5 regular, EAN/UPC, Code 39, Codabar, ABC codabar, Plessy, 2/5 3 bar, Code 93, Code 128, Pharmaceutical code 32, Delta IBM, Code 11, Telepen, Industrial 2/5 and MSI code.

The MT15 can also be configured to operate in wedge mode: this means that when the application program is standing by for input data from the keyboard, it is possible, by way of alternative, to read the corresponding barcode via any reader connected to the terminal.

Using its optical interface, the MT15 can be connected to a host computer in "Point To Point" mode with a standard RS232, or up to 32 MT15s can be simultaneously connected in "Multidrop" mode with a standard RS485.

In this way, it is possible to load an application program realised on the PC onto one or more MT15s simultaneously and then store the data collected by the MT15s on the same host computer. The Baud rate, number of data bits, parity and stop are all configurable by the user. In the stand-alone version, that is, without the OM10 cradle, data transmission is carried out via the RS232 serial port positioned on the upper part of the terminal.

The OM10 cradle, which can also be mounted on a wall, acts as a support to the MT15, as a re-charging unit for its internal batteries and for a spare battery pack, and as a communication interface with the host computer.

The OM10's 3 LEDs signal supply (red), spare battery pack re-charging (green) and data transmission with the host computer (yellow).

The MT15 is equipped with two LEDs. The red one flashes to signal the necessity of battery re-charging and the green one is permanently on when the terminal is connected to the OM10 cradle or when the supply jack is connected, to signal internal battery re-charging.

Models and Accessories

TYPE	NUMERIC KEYBOARD	ALPHANUM. KEYBOARD	RAM-Disk (additional)		ORDER NO.
			1 Mbyte	2 Mbyte	
MT15/A		•			920011000
MT15/N	•				920011010
MT15/A1		•	•		920011020
MT15/N1	•		•		920011030
MT15/A2		•		•	920011040
MT15/N2	•			•	920011050
ACCESSORIES					
OM10	RS232/RS485 optic communication interface and battery recharger				B9751111
CB10	Multiple battery recharger (up to 6 batteries)				B9751107
B10	700 mA/h removable battery pack				B9751112
LA485S	RS232/RS485 converter				B9751108
PG110/DVE-1212A	Power supply (110 Vac to 12 Vdc)				B9751057
PG220/DVE-1212A	Power supply (220 Vac to 12 Vdc)				B9751027

Specifications

POWER SUPPLY	700 mA/h Ni-Cd rechargeable and replaceable batteries
CONSUMPTION	
Off	650 uA (typical)
Sleep	7 mA
Idle	30 mA
Normal Operating	90 mA
Backlight On	+30 mA
BATTERY LIFE	14 hours (8 readings/min, with DL65 reader)
CPU	V40 16 bit microprocessor
MEMORY	
RAM	1 MByte (configurable in RAM and RAM-Disk)
FLASH	512 KByte
RAM-DISK (additional)	1 or 2 Mbytes
INTERFACES	
Serial Port	RS232
Barcode Port	Pen, CCD, or laser gun
Power Supply	Connector for battery recharge
RS232 and RS485	Via the OM10 optical communication interface
BAUD RATE	110 to 9600
TRANSMISSION FORMAT	7 or 8 data bits with 1 or 2 stop bits
PARITY	Even, odd, none
SOFTWARE	
Novell Netware PalmDOS 1.0	Operating System
Datalogic Shell	"User-friendly" menu driven graphic interface
Data Base Manager	Configurable application generator
BAR CODES	16 types incl. 2/5, Code 39, Code 93, Code 128, EAN/UPC, Codabar
INDICATORS (beeper and LEDs)	Adjustable volume beeper and LEDs indicating: Power on, battery-low, recharge, diagnostic
DISPLAY	Grafic High Contrast LCD with backlight Character mode: 4 x 20 chars Graphic mode: 120 x 32 pixels
KEYBOARD	"Numeric" and "Alphanumeric" (both with 23 alphanumeric and function keys)
DIMENSIONS	72 x 41 x 176 mm (2.8 x 1.6 x 6.9 in.)
WEIGHT	370 g (13.0 oz.) (batteries included)
HOUSING	Polycarbonate
OPERATING TEMPERATURE	0 to 40 °C
STORAGE TEMPERATURE	-20 to +70 °C
HUMIDITY	90% non condensing
PROTECTION CLASS	IP50

Dimensions

MT15

41 / 1.61
72 / 2.83
31 / 1.22
176 / 6.93
mm / inch
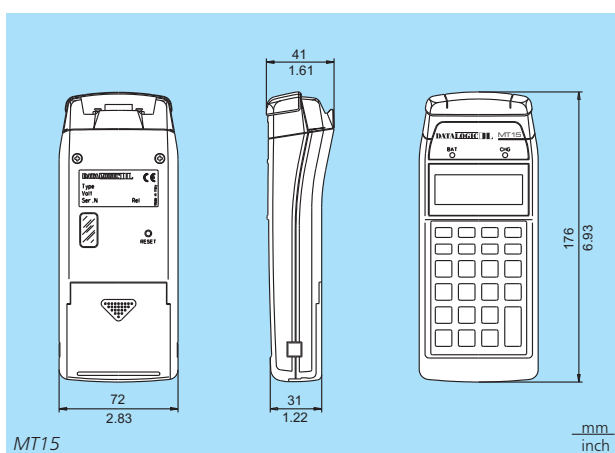
Wall Mounting
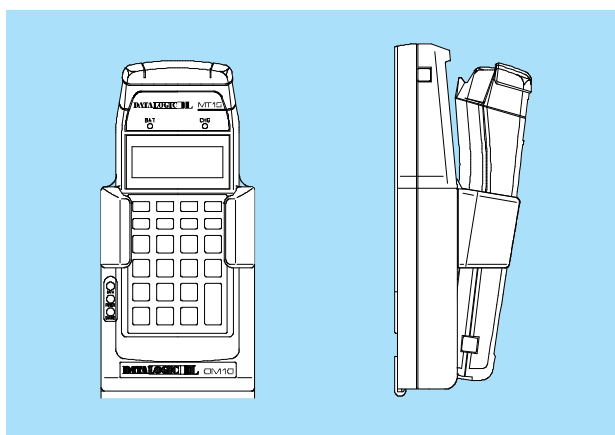
We reserve the right to make modifications and improvements

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Bar Code & More

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