



# Compact 3

## GENERAL CHARACTERISTICS

Compact 3 is a small size PLC terminal, +24VDC powered, with serial interfaces and Windows CE 6.0 operating system, designed to be installed as the only operator interface. By means of a 7" touch-screen monitor with resolution 800 X 480 pixel, the PLC system takes advantage of the PC architecture for:

- Machine cycles
- User interface

This system is particularly suitable for small machines up to a maximum of 2 axes operated in point-to-point positioning. The motion control functions are delegated to Drive ( $\mu$ Eco, miniEco and Eco) through the S-NET protocol. The debug and development environment for the automation functions is Albatros (minimum v3.1 - see catalogue software section), that is hosted on the development PC; the user interface software is installed on the Compact 5 and is equipped with a dedicated editor to programming with graphical preview of the two-dimensional piece.

## Compact 3 SYSTEM

- small size PLC terminal with integrated 7" touch-screen monitor.
- CE certificate and EMC Directive compatibility



## S-NET FUNCTION

- The S-NET bus consists of a communication based on the RS485 that allows the sending of commands to position the axes.
- The S-NET bus is a protocol designed by Selema Srl.
- Implemented communication format: send commands and receive notifications via ASCII strings directly managed by the GPL. Provides a library of basic functionality with the possibility of customization.
- Axis position control is performed by the drive  $\mu$ Eco, miniEco and Eco; All parameters can be chosen by the PLC.
- Cycle time (Real Time) 2 ms.
- Max. 2 drives
- Drive parameters can be sent or read.
- Drive and communication diagnostic in real time
- Instruction to query for parameters and drives. They are available in a library and can be recalled by a code.

## RS485 FUNCTION

- Connection to the fieldbus RS485 v1.0 Series TRS-485.
- Ability to manage up to 128 lines of bidirectional I / O configurable with refreshments at 10 ms.
- Ability to manage an Encoder signal LineDriver  $\pm 10V$ .
- Ability to manage analog signals in general purpose  $\pm 10V$  input and output.

## Compact 3 COMPOSITION

- MPU Board: 32Bit RISC CPU 600MHz, RAM of 256MB.
- Conessioni per funzioni di controllo: Serial COM1 (RS-485 4W), Serial COM3 (RS-485 2W), 1 Ethernet LAN 10/100 Base-T, 1 USB 2.0 socket, 1 miniUSB 2.0 socket, 1 card slot SD/SDHC, audio output Jack.
- Memory Unit Storage, made of a Compact Flash device of 256 MB.
- Windows CE 6.0 Operating System, on which the TPA CN firmware is installed.
- Mechanical, rectangular, metal box, small in size

Processor	32Bit RISC CPU 600MHz
Memory	256 MB
SSD	256 MB Flash Memory
Operating System	Windows CE 6.0 con .NET CF 3.5
Software	Albatros v3.1
Operating temperature	20 – 50°C
Moisture	10 – 90% relative moisture, without condensation
Power supplier	+24V DC $\pm$ 20%
Dimension	200 x 146 x 42.5mm
Weight	900 g max
Assembly	on panel
Usable connections	2 x RS485 half duplex e full duplex, 2 x USB 2.0
Link to supervisor	1 x Ethernet LAN 10/100BaseT
Max.Axes number	2
Real Time Period	min. 2 ms
RS485 v1.0	configurable Baud Rate: 19.2, 38.4, 57.6, 115.2 Kbit/s max 4 I/O devices
Certificazioni	CE, RhoS, UL-CSA and EMC Directive compatibility