



TOP7 ■ TOP10 ■ TOP12

The PLC / CNC / HMI line TOP series is a true revolution in the concept of automation, incorporating the robustness and reliability of industrial PLC/CNC and the potential of interconnectivity and interfacing of PC operating systems.

The range is composed of 3 different sized HMI (7"/ 10"/ 12") colour Touch Screen with a front USB port and a 6-button mechanical supporting keypad.

| | TOP7 | TOP10 | TOP12 |
|-------------------|--|-------------------|-------------------|
| Power supply | 24Vdc 1A | | |
| Display | 7" 800x480 | 10" 800x600 | 12" 800x600 |
| Keyboard | 6-button mechanical keyboard | | |
| Touch screen | Industrial resistive technology touch screen | | |
| Serigraphy | Polycarbonate for industrial environments | | |
| Programming | Ladder/C/ISO on ETHERNET / USB | | |
| Time register | Yes | | |
| Fieldbus | 2 CANOPEN ports – 2 MODBUS ports (optional) | | |
| Usb | 1 front USB (1 USB on the back optional) | | |
| Ethernet | 1 Ethernet port 10/100 Mbit | | |
| Connectors | Removable by screw or optional with spring | | |
| DIMENSIONS | | | |
| Front | H: 150mm / L: 205 | H: 212mm / L: 283 | H: 250mm / L: 340 |
| Depth | P: 66mm | P: 81mm | H: 85mm |

ALL-IN-ONE SOLUTION – MODULAR AND CONFIGURABLE

TOP systems integrate HMI, PLC and CNC (axis control) into a single product, offering an integrated solution that meets every need. The ability to directly configure the product with the required analog/digital I/O cboards completely autonomously makes the solution even more flexible. Finally, the possibility to integrate on board or remote I/O extends its usability, both for compact electrical panel applications and for remote Operator Panels.

SELF-DETECTING SYSTEM

The system consists of 5/7/8 slots for inserting I/O cards and is based on a sophisticated communication bus that automatically detect each inserted card, thereby addressing the available resources.

PC-ORIENTED AND INDUSTRIA 4.0 SOLUTION

The PLC / CNC / HMI line TOP series is Linux o.s.-based and integrates PC-Oriented functionality, such as the possibility of network connectivity, remote control (VNC SERVER), data exchange with corporate information systems, standard file formats managing (CSV, DXF, PDF, etc.), and database accessing (MySQL).

MOTION CONTROL, KINEMATICS / ROBOTICS AND LINKED MOTION

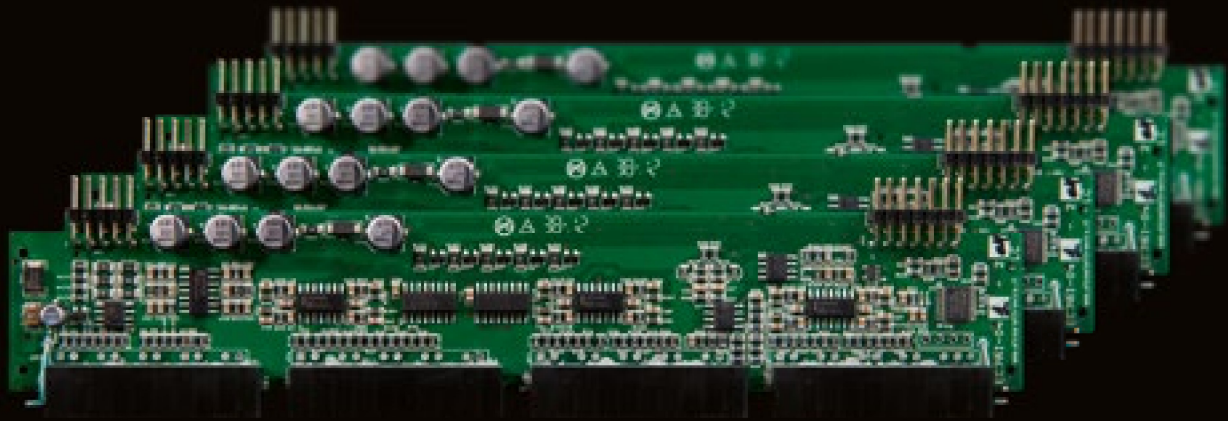
TOP products incorporate a G ISO Code processor and manage advanced kinematics and robotics (SCARA, DELTA, ANTHROPOMORPHIC), as well as evolved linked motion such as GANTRY AND ROTARY LINEAR FLYING SAWS.

COMMUNICATIONS AND FIELDBUS

The system is equipped with serial communication ports (RS232 / RS485), CAN and ETHERNET, thus offering the possibility of interfacing using standard protocols such as MODBUS RTU / TCP/IP and CAN BUS CAN OPEN with external slave devices (drives, remote I/O, inverters, sensoristics, supervision scada, etc.).

PROGRAMMABILITY

The high degree of flexibility and ease of use is ensured by integrated programming via Elco Automation Studio software: a development suite that allows a single software to create PLC logic (PLC), axis Motion Control (CNC) and operator interface (HMI).



INTEGRATED TOP SERIES BOARDS

EC7XX boards are a flexible solution that allows you to complete the PLC/CNC/HMI TOP series with analog/digital I/O, communication and fieldbus resources.

| CODE | FEATURES | SLOT |
|------------|---|------|
| EC7COM_011 | 24Vdc power supply + 2 RS232 + 1 ETHERNET | COM |
| EC7COM_012 | 24Vdc power supply + 2 RS232 + 1 ETHERNET + 2 RS485 + USB retro | COM |
| EC7COM_013 | 24Vdc power supply + 2 RS232 + 1 ETHERNET + 2 RS485 + USB retro + CAN | COM |
| EC7DIO_021 | 16 PNP 24V digital inputs + 16 PNP 24V 1 A digital outputs | STD |
| EC7AS_031 | 2 ENCODER inputs (NPN – PUSH PULL – LINE DRIVER) + 2 16 bit analogue outputs (+/- 10V) + 2 pulse/dir frequency outputs (5V LD 2Mhz) | STD |
| EC7AI_041 | 8 16 bit analogue outputs (0-10V – 4-20mA – PT100) + 2 16 bit analogue outputs (+/- 10V) | STD |
| EC7SM_051 | 2 24Vdc – 1.5A stepper drives | EXT |
| EC7SS_091 | 6 SSI inputs | EXT |

The boards can be inserted into one of the 5/7/8 slots available without any constraints. The system is equipped with a self-detecting and self-addressing resource mechanism that allows easy, fast and flexible installation.

