Touch screen CNC with PLC functions and on board I/Os

EVO

Technical Features

ROTAZIONE ASSE W

ETHERNET — POWER SUPPLY — 2x RS232/485

2x CAN   2x USB   LOCAL I/Os

5/24V SWITCH FOR HIGH SPEED DIGITAL INPUTS
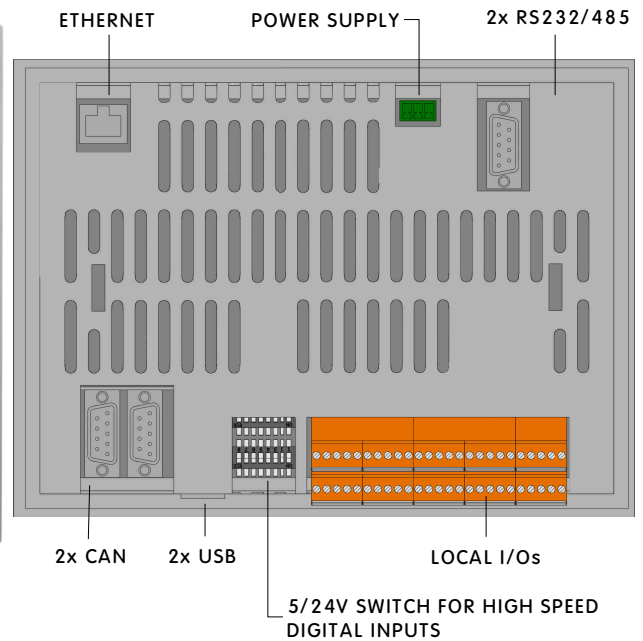
as big as it needs to be

Everything needed to control the entire machine fits into a single unit the size of an HMI: we've integrated a powerful PLC, a positioner with interpolation capabilities, I/O peripherals and touchscreen operator interface in one compact package

no compromises

At the same price of an operator interface, Sirius offers even a PLC, a motion control and on-board I/Os

ready to work

Long cable runs on the machine and control panel are a thing of the past: everything's right there in the package. And if the system needs expanding, intelligent SIO peripherals are designed for fast, functional installation
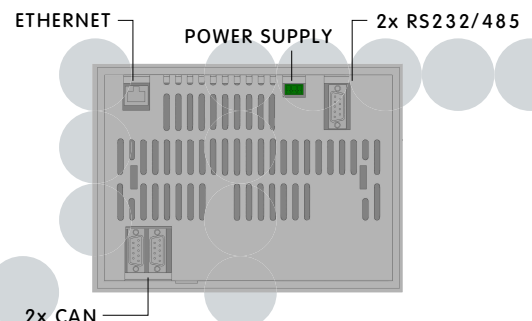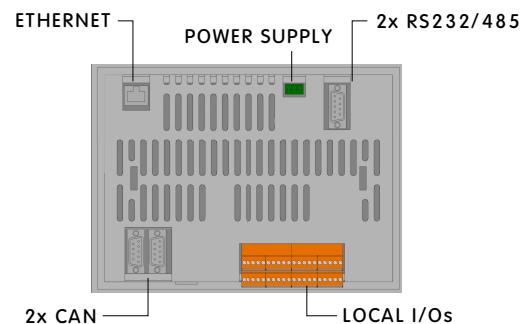
the black box

The machine itself provides all the information needed to pinpoint any problems: evo performs a complete diagnostic analysis and sends it directly to your desk or cell phone

no sooner said than done

Thanks to intelligent SIO peripherals, Linux RTAI system and programmable FPGA, you can make the machine do anything you ask it to do, keeping the same programming logic and the same architecture

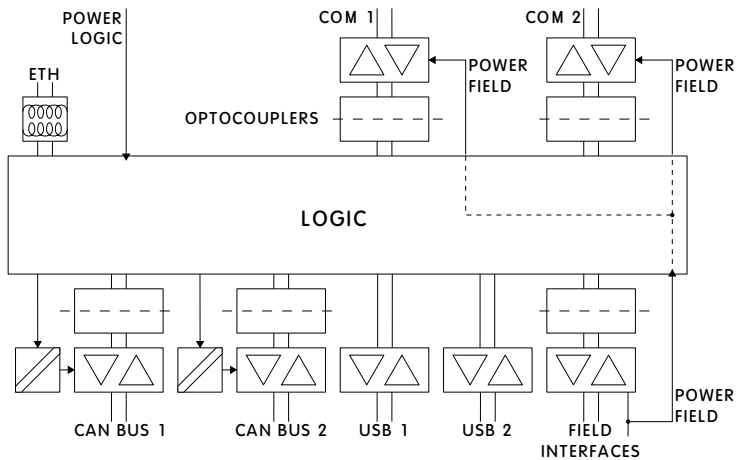EVO is avaiable in three different models with four LCD sizes

ETHERNET — POWER SUPPLY — 2x RS232/485

2x CAN — LOCAL I/Os

ETHERNET — POWER SUPPLY — 2x RS232/485

2x CAN

REALTIME COMPUTING
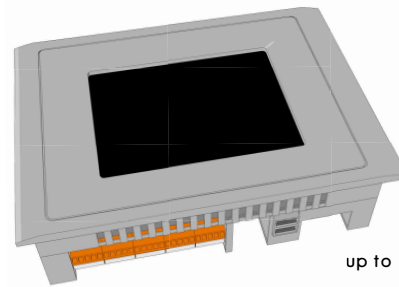
EVO

PLC+HMI+CNC+ONBOARD I/O

Power Level Isolation

Integrated Oscillope
2k memory
all-variables

FPGA
16 IN + 8 OUT
customizable

Motion Control
point to point
electronic cam
electric axis
up to 24 axes interpolated
cubic interpolation
joint acceleration control

HMI-PLC,CNC and I/O in a single compact unit
Linux RT-based o.s. guaranteeing realtime performance
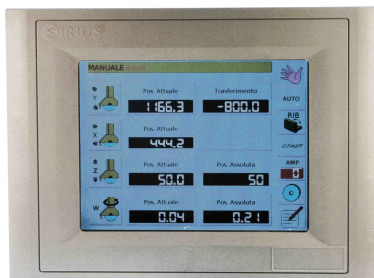High-brightness touchscreen, available from 5.7" to 12"
Powerfull integrated oscilloscope for axis calibration or setup
CANopen, USB and Ethernet for flexible communications
Ladder, FB and 'C' language programming capability
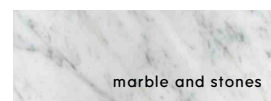EMC^2* capable

Mechanical Features

Mechanical dimensions (millimeters)

5,7"	6.4"	10"	12"
212	212	313	356
156	156	210	265
60	60	80	80
Weight (Grams)			
670	700	1400	1900
Faceplate IP Protection			
IP65	IP65	IP65	IP65
Rear IP Protection			
IP20	IP20	IP20	IP20

Application areas

metal

plastic

marble and stones

wood

Technical Specs

number of high speed PNP inputs	16
nominal voltage	24VDC e 5VDC (select via internal dip-switch)
'0' signal voltage	-3...3V (-0.5...1V)
'1' signal voltage	15...30V (2...5V)
max frequency	200kHz
input current	10mA typ.
application	standard input, monodirectional counter, quadrature encoder

number of analog inputs	up to 4 differential or 8 single ended (software selectable)
input voltage range	0..10V
resolution	14/16 bits
gain	1, 4, 50, 200 (software selectable)
filter	no
conversion time	1mS

number of analog outputs	8
output voltage range	-10..+10V
resolution	12/16 bits

number of high speed PNP outputs	8
max current	500mA
short circuit protection	yes
application	PWM up to 10kHz

These informations refer to the fully equipped version.

controller	MPC5200 (PowerPC)
RT clock	battery-buffered
display type	STN / TFT 256 / 64k colors
touch screen	analog resistive
screen resolution	5,7" 6.4" 10" 12" / 320x200 640x480 640x480 800x600
operating system	Linux RTAI / Xenomoi based
weight	600-1900gr
isolation	500V rms
weight	500gr
operating/storage temp.	0ºC...+55ºC/-25ºC...+85ºC
relative humidity	95%, no condensation
power level separation	CANbus-CPU field-CPU serial-CPU ethernet-CPU
power supply	24V (+/-15%)
current CPU consumption	1A
protection class	IP20
vibration/shock resistance	EN 60068-2-6 / EN 60068-2-27/ 29
EMC/ESD resistance	EN 61000-6-2 (EN 50082) EN 61000-6-4 (EN 50081)
PDO configuration	16bits
external connections	2x RS232 / 485 2x USB 2 1x Ethernet 2x CAN OPEN

*EMC2 is the most versatile open source numeric control

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