elap VEGA⁺

elap VEGA⁺

MULTIFUNCTIONAL CONTROLLER
with embedded PLC

Touch screen

- *Control over one or two digital axes*
- *Embedded PLC, Ladder or Instruction List programming*
- *Touch screen*
- *Graphical pages handled*
- *Interface completely programmable via PC*
- *Proprietary fieldbus for I/O expansion*
- *Compatible with VEGA*
- *Modbus RTU communication protocol*

New graphical design and a **powerful man-machine interface** are the main features of the **controller VEGA+.**
The wide **TFT color display** is rear-lighted. Its **touch screen** functions are easily set by means of a dedicated program.
VEGA+. controls one or two digital axes with 12 bit analogue output; its mighty **embedded PLC** can be programmed both in Ladder and in Mnemonic language.
VEGA+ hardware specifications are consistent with VEGA prior version, while its software was enhanced to handle the touch screen functionalities.
VEGA PLC programs and tasks are compatible with VEGA+ applications.

HARDWARE
- **CPU** 32 bit RISC 65 MIPS
- **Flash memory** 256 Kbyte
- **RAM** for user programs, data and pages: 512 Kbyte - optional 128 Kbyte NV RAM
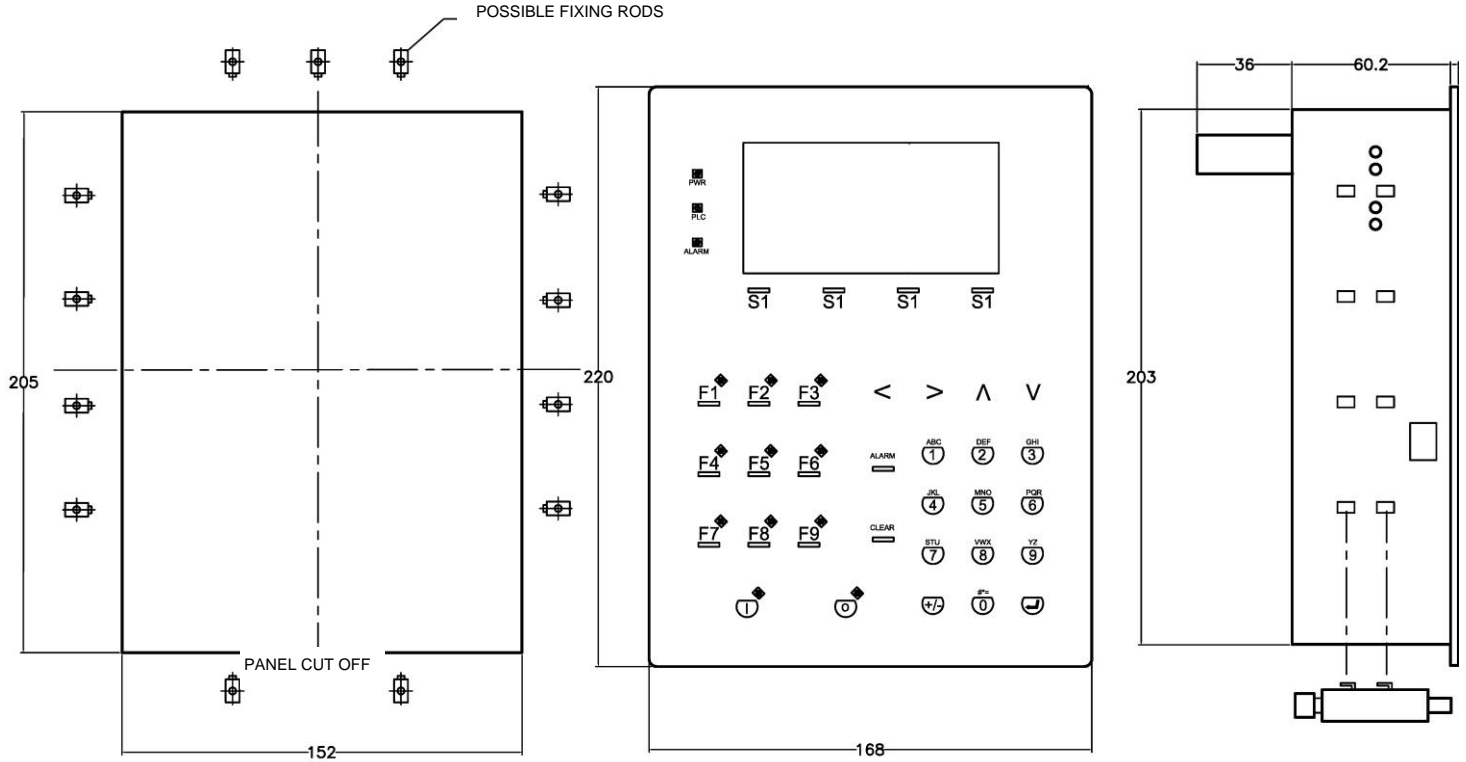
USER INTERFACE
- **Polyester** 33-key-**KEYBOARD,** each key having programmable functions, i.e.:
  4 keys in the display area
  9 function keys with signalling LEDs
  4 direction keys
  1 key for the reset function or alarm display
  Numerical pad
  START and STOP push-buttons with LEDs
- TFT COLOR **DISPLAY** Touch Screen 432 x 240 pixel, 4.2 inch, 65000 colours
  64 expandable text pages
  256 messages, each by 20 bytes
  Storable data structures with indexed access (recipes)
  Texts handled in four languages
  Images by 128x128 pixel for icons and animation
  Graphical touch screen push-buttons

INTERFACE TO THE FIELD
- **DIGITAL INPUTS:** 16 optoisolated inputs + 2 devoted to the interrupt command
- **DIGITAL OUTPUTS:** 16 50 mA optoisolated outputs I max 50 mA
- **INCREMENTAL ENCODERS**: 2 5V- Line Driver (RS422) bidirectional count inputs with zero reference reading, 500 KHz frequency
- **AXIS COMMAND:** 2 12-bit ±10Vdc differential analogue outputs. Possibility to command ON/OFF axes
- **ANALOGUE INTPUTS**: 4 0÷5 V analogue inputs with 10 bit resolution - Optional: 10 V analoogue outputs
- **ALARMS:** 1 contact for system watch-dog
- **COMMUNICATION:** 2 RS232 serial ports or 1 RS232 + 1 RS485 serial port – optional 1 USB port
- **EXPANSION MODULES:** 16 inputs + 16 outputs 500 mA
- DIN bar fixing
- **Modbus RTU** communication protocol in master or slave mode

DIMENSIONS

POSSIBLE FIXING RODS

PANEL CUT OFF

205   220   203   152   168   36   60.2

GENERAL SPECIFICATIONS

- Front protection degree: IP65
- Supply: 24 Vdc ±15% 24 Watt max.
- Connections:
- Extractable terminal box: supply, digital I/O
- Canon connectors: encoder, analogue I/O, serial ports
- On request: digital outputs on relay modules
- Lithium battery 5 years life (Except type with NV RAM)

ORDERING INFORMATION

VEGA+	1 axis	M	512K RAM	R

Serial Ports
R = 2 RS232 serial ports   **U** = 2 RS232 serial ports+1 USB
S = 1 RS232 + 1 RS485 serial ports   **V** = 1 RS232 + 1 RS485 serial ports+1 USB
T = 1 RS232 + 1 RS422 serial ports   **Z** = 1 RS232 + 1 RS422 serial ports+1 USB

RAM Capacity
512 KB RAM
128 KB NV RAM

Input/Outputs Connections
M = 16 + 16 I/O terminal box connections
R = 16 + 16 I/O on external relay modues

Controlled Axes
1 axis
2 axes

Type
VEGA+