

# Control Panel VARAN ETV 1591



mit 15" XGA TFT-Farbdisplay

The control panel is an intelligent terminal for programming and visualization of automated processes. A touch screen serves as the input medium for process data and parameters. The output is shown on a 15" XGA TFT color display.

To safely back up the data before the panel is shut down, an integrated UPS is used to buffer the +24 V power supply.

With the integrated VARAN manager, the ETV 1591 offers the possibility to construct a high-performance VARAN system to operate for example, decentralized I/O modules, drive systems or communication modules. Operating system Windows 7 embedded.

## Performance Data

Processor	1.4 GHz Intel® Celeron B827E
Intel® Smart Cache	1.5 Mbytes
BIOS	AMI
SDRAM 50-DIMM 20-pin	2-Gbyte DDR3
SRAM	512-Kbyte
Internal storage device	100-Gbyte SATA HDD
Interfaces	5x USB 2.0, Type A (High Speed 480 Mbit/s) 2x Gbit Ethernet 1x VARAN Out
Internal interface connections and devices	1x TFT LCD color display 1x touch 1x CF card socket 1x interface for connectable UPS
Display Resolution	15" TFT color display 1024 x 768 pixels
Control panel	5-wire touch screen (analog resistive)

Data buffer	yes
Signal generator	yes
Status LEDs	no
Real-time clock	yes (battery buffered)
Cooling	active (fan)

## Electrical Requirements

Supply voltage	typically +24 V DC	
	minimum +20 V DC	maximum +30 V DC
Supply voltage (UL)	20-30 V DC (Class 2)	
Current consumption Power supply +24 V	1.25 A (without externally connected devices/100 % CPU load) (WIN7 embedded)/75 % brightness display)	
Inrush current	maximum 28 A for 170 µs	

## Terminal

Dimensions with battery	358 x 313 x 109 mm (W x H x D)
Dimensions without battery	358 x 313 x 81 mm (W x H x D)
Material	plastic housing: ASA
Weight	5.3 kg

## Environmental Conditions

Storage temperature	-10 ... +85 °C	
Operating temperature	0 ... +50 °C	
Humidity	10-90 %, non-condensing	
EMC stability	EN 61000-6-2: EMC resistance EN 61000-6-4: noise emission	
Vibration tolerance	EN 60068-2-27	150 m/s <sup>2</sup>
Shock resistance	EN 60068-2-6	2-9 Hz: amplitude 3.5 mm 9-200 Hz: 1 g (10 m/s <sup>2</sup> )
Protection type	EN 60529 protected through the housing	front: IP54 rear panel: IP20

## Display

Type	15" TFT color display
Resolution	1024 x 768 pixels
Color depth	18-bit (262 144 colors)
Pixel grid	0.297 mm x 0.297 mm
Active surface	304.128 mm x 228.096 mm
Backlighting	LED
Contrast	typically 700: 1
Brightness	typically 400 cd/m <sup>2</sup>
Angle CR > 10 from	left and right 80°, above and below 70°

## Control Unit

Touch panel	analog resistive film-glass touch panel
Resolution	12-bit Controller (USB)
Connection technology	5-wire

## Article Number and Miscellaneous

Article number	12-230-1591
Operating system	Windows Embedded Standard 7
Project backup	100-Gbyte SATA HDD
Hardware version	2.x
Standard	UL 508 (E247993)

## Notes

