

Multi-touch Operating Panel

TT 1933-S



with 18.5" WXGA TFT color display

The TT 1933-S is an intelligent terminal for programming and visualization of automated processes. Process diagnostics as well as operating and monitoring automated procedures are simplified using this terminal. A projective capacitive touch screen serves as the input medium for process data and parameters. The output is shown on a 18.5" TFT color display.

The available interfaces can be used to exchange process data or configure the terminal. In the internal Flash memory, the operating system, application and application data are stored.

Performance Data

Processor	EDGE2 Technology
Processor cores	2
Internal cache	32-kbyte L1 Instruction Cache 32-kbyte L1 Data Cache 512-Kbyte L2 Cache
Internal program and data memory (DDR3 RAM)	512-Mbyte
Internal remnant data memory	512-kbyte MRAM
Internal storage device (IDE)	1-Gbyte microSD
Internal I/O	no
Interfaces	3x USB 2.0, Type A 2x Ethernet
Internal interface connections and devices	1x TFT LCD color display 1x USB (touch connection)
Display Resolution	18.5" TFT color display 1366 x 768 pixels
Control panel	Touch screen (projective capacitive)

Real-time clock	no
Cooling	passive (fanless)

Electrical Requirements

Supply voltage	typically +24 V DC (+18-30 V DC)	
Current consumption of power supply at +24 V	typically 650 mA (without externally connected devices)	maximum 850 mA (with externally connected devices)
Inrush current	maximum 30 A for 35 µs	
UL-Standard	For UL: must be powered with SELV / PELV and limited energy; digital outputs must also be powered with SELV / limited energy	

Terminal

Dimensions	471.6 x 344.5 x 44 mm (W x H x D)
Material	Frame und front: aluminum/glass Backside: sheet steel ESD lacquer
Weight	typically 5 kg

Environmental Conditions

Storage temperature	-10 ... +60 °C	
Environmental temperature	0 ... +45 °C	
Humidity	10-95 %, non-condensing	
Operating conditions	pollution degree 2 Indoor areas only altitude up to 2000 m	
EMC resistance	in accordance with EN 61000-6-2 (industrial area)	
EMC noise generation	in accordance with EN 61000-6-4 (industrial area)	
Vibration resistance	EN 60068-2-6	2-9 Hz: amplitude 3.5 mm 9-200 Hz: 1 g (10 m/s²)
Shock resistance	EN 60068-2-27	15 g (150 m/s²) duration 11 ms, 18 shocks
Protection type	VESA100 carrier arm mount: IP54 VESA75 carrier arm mount: IP54, whereby the VESA100 mounting holes must be closed with protective caps or screws	
	EN 60529 protected through the housing	front: IP54 (not UL-listed) rear panel: IP54 (not UL-listed)

Display

Type	18.5" TFT color display
Resolution	WXGA 1366 x 768 pixels
Color depth	16.7M (6-bit RGB + Hi_FRC)
LCD mode	normally black
LCD polarizer	transmissive 2
Pixel size	0.3 x 0.3 mm
Active surface	409.8 x 230.4 mm
Backlighting	LED
Contrast	typically 1000:1
Brightness	typically 250 cd/m²
Typical angle CR = 10	left, right 85° bottom, top 80°
Life span	by compliance with the ambient conditions, the brightness of the display sinks after 30,000 operating hours to 50 % of the original brightness

Control Unit

Touch panel	Projective capacitive glass touch panel
Sensor type	Film glass

Article Number and Miscellaneous

Article number	01-270-1933-S
Operating system	Salamander
Standard	UL in preparation
Approvals	UL, cUL, CE

Notes

