Built-In Terminal

ET 0710-02

with 7" WSVGA IPS color display and plastic housing

The ET 0710-02 is an intelligent panel for visualizing, operating and monitoring automated processes. Process diagnostics is therewith simplified. A projective capacitive touch screen serves as the input medium for process data and parameters. The output is shown on a 7" IPS color display.
With the LASAL visualization tool, graphics can be created on the PC, then stored and displayed on the handheld operating panel. The available interfaces can be used to exchange process data or configure the multi-touch terminal.
The operating system, application and application data are stored on the internal storage medium.

Performance Data

Processor	EDGE3 Technology
Processor cores	4
Internal program and data memory (RAM)	2-Gbyte (LPDDR4)
Internal remnant data memory	128-kByte FRAM
Internal storage device	8-Gbyte microSD (16-Gbyte 2:1 formatted ~60k P/E cycles)
Optional memory expansion	no
Graphic	integrated in EDGE processor
Interfaces	2x Ethernet (10/100) 1x USB 2.0 Host Type A 1x USB 2.0 Host/Device Type C 1x RS485 2x CAN 1x RS232 1x microSD card holder (SD 3.0)
Internal interface connections and devices	no
Operating components	no
Signal generator	no

Display Resolution	7" IPS color display WSVGA 1024 x 600 pixels
Operating field	Touch screen (multi-touch, projective capacitive)
Status LEDs	yes, 2-color front LED (green/red) Status LEDs (green/yellow)
Real-time clock	yes (battery buffered)
Cooling	passive (fanless)

Electrical Requirements

Supply voltage	+24 V DC ±20 % (SELV/PELV) UL: NEC Class 2	
Protection class	III	
Current consumption of power supply (+24 V)	typically 320 mA (with no external devices connected)	maximum 530 mA (with external devices connected)
Inrush current without currentlimiting	60.5 A for 41 µs	
Inrush current with 24 V/10 A	1 A for 100 ms	

Terminal

Dimensions	193 x 130 x 37 mm (W x H x D)
Material	Housing: plastic Color: black Front: glass 1.1 mm
Weight	0.45 kg

Display

Type	7" IPS color display
Resolution	WSVGA 1024 x 600 pixels
Color depth	24-Bit RGB
LCD mode	normal black
LCD Polarizer	transmissive
Pixel size	0.1506 x 0.1432 mm
Active range	154.21 x 85.92 m
Backlighting	LED, adjustable
Contrast ratio	typically 800:1
Brightness	typically 350 cd/m²
Angle CR ≥ 10	left, right, top, bottom typically 85°
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

Operating field	Touch screen (multi-touch, projective capacitive)	
Maximum number of fingers	5	
The operation with thin gloves	yes	
SIGMATEK Touch pen (passive)	yes	
Handwriting recognition	no	
Ball of the thumb recognition	no	
Water spray recognition	yes	
Water detection	no	

Input

Input	Multi-touch screen (PCAP)	

Environmental Conditions

Storage temperature	-30 ... +70 °C	
Environmental temperature	0 ... +50 °C	
Humidity	10-95 %, non-condensing	
Installation altitude above sea level	0-2000 m without derating > 2000 m up to a maximum of 5000 m with derating of the maximum environmental temperature by 0.5 °C per 100 m	
Operating conditions	pollution degree 2	
Noise emissions	≤ 70 dB	
EMC resistance	EN 61000-6-2 (industrial area)	
EMC noise generation	EN 61000-6-4 (industrial area) EN 61000-6-3 (residential area)	
Vibration resistance	EN 60068-2-6	3.5 mm from 5-8.4 Hz 1 g from 8.4-150 Hz
Shock resistance	EN 60068-2-27	15 g (147.15 m/s²)
Protection type	EN 60529/NEMA 250	front: IP65/Type4 cover: IP20/Type1

Article Number and Miscellaneous

Article number	01-235-0710-02	
Operating system	Salamander	
Default IP address	10.10.150.1	
Printed circuit board coating	no	
Approvals	CE	yes
	UL	designed according to UL
	Functional Safety	no
	UCKA	no

Notes