Multi-touch Operating Panel
ETT 1533

backlighted customer logo optionally available

with 15" XGA TFT color display

The multi-touch operating panel is used for visualizing, operating and monitoring automated processes. A capacitive touch screen serves as the input medium for process data and parameters. The output is shown on an 15" XGA TFT color display.

The available interfaces can be used to exchange process data or configure the multi touch terminal. A microSD card serves as the storage medium for the operating system, application and application data.

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 SRAM (battery buffered)
Internal storage device	1 Gbyte microSD card
Internal I/O	yes
Interfaces	2x USB-Host 2.0, type A 1x USB-OTG (host/device), type Mini B 2x Ethernet 1x CAN bus (not galvanically separated)
Internal interface connections and devices	1x TFT-color display 1x USB (touch connection)
Display Resolution	15" TFT color display 1024 x 768 pixels
Control panel	Touch screen (projective capacitive)
Logo backlighting	optional (RGB)
Real-time clock	yes (battery buffered)
Cooling	passive (fanless)

Electrical Requirements

Supply voltage	typically +24 V DC (+18-30 V DC)	
Current consumption Power supply +24 V	typically 730 mA (without ext. connected devices)	maximum 890 mA (with ext. connected devices)
Inrush current	maximum 2 A for 10 µs	
UL standard	for UL: must be supplied with SELV / PELV and Limited Energy Digital output also is SELV / Limited Energy.	

Terminal

Dimensions	376.1 x 310.1 x 47.9 mm (W x H x D)
Material	front plate: 4 mm glass on 1.5 mm aluminium frame
Weight	typically 4.7 kg

Environmental Conditions

Storage temperature	-10 ... +75 °C	
Environmental temperature	0 ... +55 °C	
Humidity	10-95 %, non-condensing	
Operating conditions	pollution degree 2 indoor use 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	EN 60529 protected through the housing	front: IP65 (no UL-rating) cover: IP20 (no UL-rating)

Display

Type	15" TFT color display
Resolution	XGA, 1024 x 768 pixels
Color depth	24 Bit RGB
LCD mode	normally black
LCD polarizer	transmissive
Pixel size	0.297 x 0.297 mm
Active surface	304.1 x 228.1 mm
Backlighting	LED
Contrast	typically 1500:
Brightness	typically 400 cd/m²
Angle CR ≥ 10	left, right, below, above 85°
Lifespan	by compliance with the ambient conditions, the brightness of the display sinks after 50,000 operating hours to 50 % of the original brightness

Control Unit

Touch panel	projective capacitive touch panel
Surface	4 mm front glass with black frame + SIGMATEK logo

Digital Outputs

Number	8
Short-circuit proof	yes
Maximum permitted continuous load current/channel	0.5 A
Maximum total current (all 8-channels)	2 A (100 % of on time)
Voltage drop over power supply (output active)	≤ 1 V
Residual current (off)	≤ 12 µA
Turn-on delay	< 400 µs
Turn-off delay	< 400 µs
Max. braking energy of inductive loads	1 channel 0.12 [Joules]

Digital Inputs

Number	8	
Input voltage	typically +24 V	maximum +30 V
Signal level	low: < +4.5 V	high: > +14 V
Switching threshold	typically +11 V	
Input current	typically 5 mA at + 24 V	
Input delay	typically 5 ms	

Article Number and Miscellaneous

Article number	01-230-1533
Operating system	Salamander
Standard	UL 61010-2-201
Approvals	UL, cUL, CE