

# Touch Operating Panel ETT 1962



with 19" SXGA TFT color display

The ETT 1962 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 resistive glass touch screen serves as the input medium for process data and parameters. The output is shown on a 19" SXGA TFT color display. With the LSE mask editor, graphics can be created on the PC, then stored and displayed on the terminal. 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 SRAM (battery buffered)
Internal storage device	1-Gbyte microSD card
Internal I/O	no
Interfaces	1x USB Host 2.0, Type A (front) 1x USB Host 2.0, Type A (rear, on circuit board) 2x Ethernet 10/100 (RJ45)
Internal interface connections and devices	1x TFT LCD color display 1x USB (touch connection)
Display Resolution	19" TFT color display 1280 x 1024 pixels

Control panel	Glass touch screen (resistive touch)
Real-time clock	yes
Cooling	passive (fanless)

## Electrical Requirements

Supply voltage	typically +24 V DC	
	minimum +18 V DC	maximum +30 V DC
Current consumption of power supply at +24 V	0.85 A (without externally connected devices)	1 A (without externally connected devices)
Inrush current	1.2 A (3 ms)	

## Terminal

Dimensions	360 x 462 x 57 mm (W x H x D)
Weight incl. Mounting brackets	typically 7 kg

## Environmental Conditions

Storage temperature	-20 ... +60 °C	
Environmental temperature	0 ... +50 °C	
Humidity	10-90 %, non-condensing	
EMC tolerance	EN 61000-6-2 (industrial area): EMC resistance EN 61000-6-4: Noise emission	
Vibration resistance	EN 60068-2-6	2-9 Hz: Amplitude 3.5 mm 9-200 Hz: 1 g (10 m/s <sup>2</sup> )
Shock resistance	EN 60068-2-27	15 g (150 m/s <sup>2</sup> ), duration 11 ms, 18 Shocks
Protection type	EN 60529 protected through the housing	Front: IP54 Cover: IP20

## Display

Type	19" TFT color display
Resolution	SXGA, 1280 x 1024 pixels
Color depth	24-bit (16 777 216 colors)
Pixel size	0.294 x 0.294 mm
Active surface	376.3 x 301.1 mm
Backlighting	LED
Contrast	typically 2000 : 1
Brightness	typically 300 cd/m <sup>2</sup>
Angle CR > 10 from	left and right 89°, above and below 89°

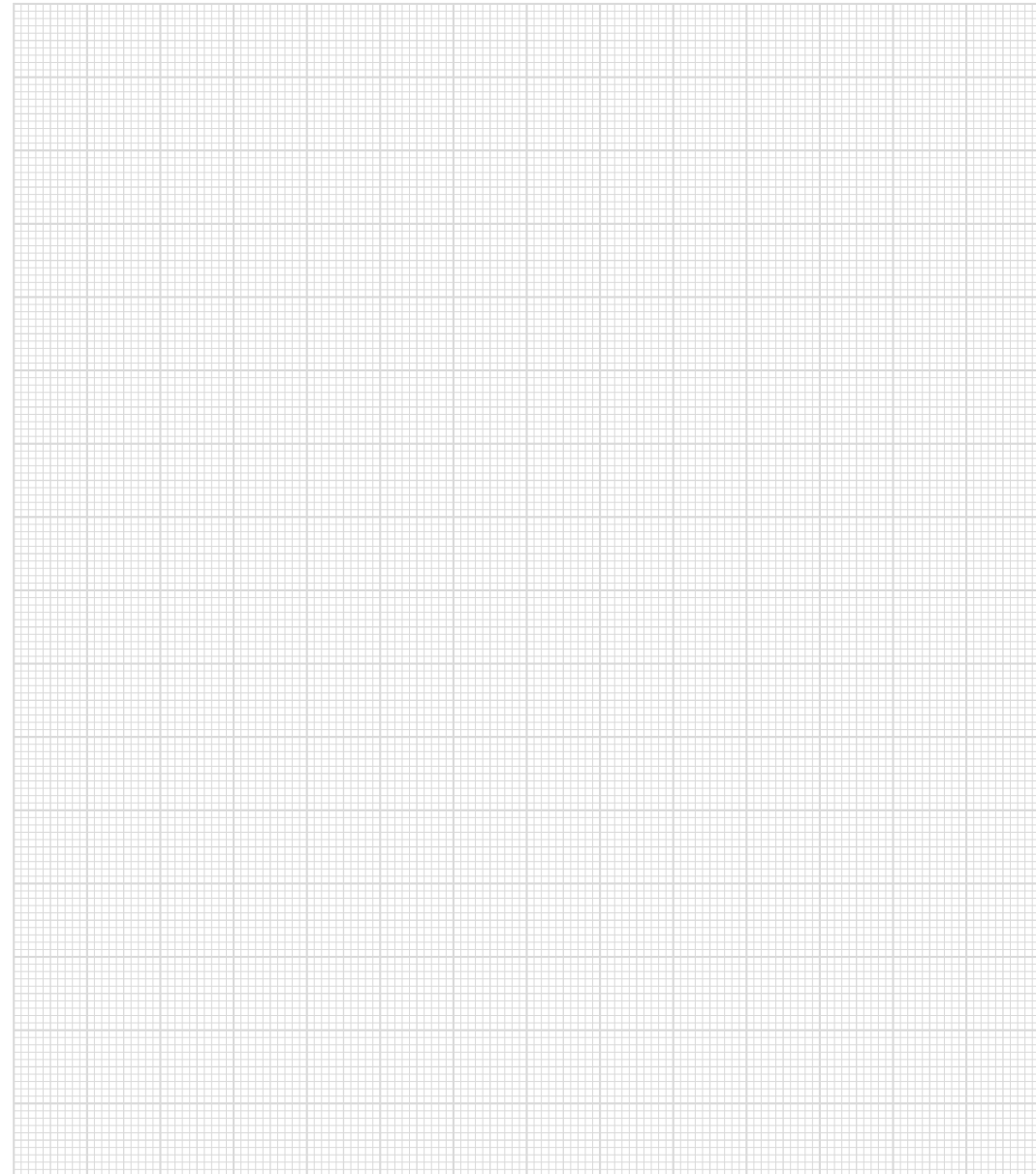
### Control Unit

Touch pad	resistive glass foil glass touch panel
Active surface	376.3 x 301.1 mm
Resolution	12-bit (4096 x 4096)
Touch precision	< 1.5 % of maximum value (5.6 mm)

### Article Number and Miscellaneous

Article number	01-230-1962
Hardware version	1.x
Software macro	LSE LASAL operating system
Project backup	internally on the microSD card

## Notes

A large grid area for taking notes, consisting of a 20x20 grid of squares. The grid is empty and occupies the right half of the page.