

# Touch Operating Panel ETT 731

with 7" WVGA TFT color display

The ETT 731 is an intelligent terminal for programming and visualization of automated processes. A resistive touch screen serves as the input medium for process data and parameters. The output is shown on a 7" WVGA TFT color display with an LED backlight. 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 build-in terminal. In the internal Flash memory, the operating system, application and application data are stored.



## Performance Data

Processor	EDGE2-Technology
Processor cores	1
Internal cache	32-kbyte L1 Instruction Cache 32-kbyte L1 Data Cache 512-kbyte L2 Cache
Internal program and data memory (DDR3 RAM)	256-Mbyte
Internal remnant data memory	256-kbyte SRAM (battery buffered)
Internal storage device	512-Mbyte NAND Flash
Internal I/O	no
Interfaces	2x USB 2.0, Type A (1x front, 1x back) 1x Ethernet 10/100 (RJ45) 2x CAN bus (6-pin Weidmüller) 1x RS232 (9-pin DSub)
Internal interface connections and devices	1x TFT LCD color display 1x touch
Display Resolution	7" TFT color display 800 x 480 pixels

Control panel	4-wire touch screen (analog resistive)
Signal generator	no
Status LEDs	1 front green LED (controllable through the application)
Real-time clock	yes
Cooling	passive (fanless)

## Electrical Requirements

Supply voltage	typically +24 V DC (+18-30 V DC)	
Current consumption of power supply at +24 V	typically 210 mA (without externally connected devices)	maximum 360 mA (with externally connected devices)
Current consumption of stand-by voltage at +24 V	typically 110 mA (without externally connected devices)	maximum 180 mA (with externally connected devices)
Inrush current	600 mA (1 ms)	
UL standard	for UL: must be supplied with SELV / PELV and Limited Energy Digital output also is SELV / Limited Energy.	

## Terminal

Dimensions	180 x 135 x 40.9 mm (W x H x D)
Material	front plate: 3 mm aluminum, black anodized
Weight	circa 600 g

## Environmental Conditions

Storage temperature	-10 ... +80 °C	
Environmental temperature	0 ... +60 °C	
Humidity	10-90 %, non-condensing	
Operating conditions	Pollution degree 2 indoor use altitude up to 2000 m	
EMC stability	in accordance with product standard EN 60730-1	
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 protection through housing	front: IP54 (no UL-rating) cover: IP20 (no UL-rating)

### 7" VGA Display incl. Touch

Type	7" TFT LCD color display
Resolution	WVGA 800 x 480 pixels
Color depth	16-bit RGB (65K colors)
LCD mode	normal white
LCD polarizer	transmissive
Pixel size	0.1926 mm x 0.1790 mm
Number of pixels	800*3 (RGB) x 480
Active surface	154.08 mm x 85.92 mm
Backlighting	LED
Contrast	500:1
Brightness	typically 280 cd/m <sup>2</sup>
Visible field	left and right 70°, below 70°, above 50°

### Article Number and Miscellaneous

Article number	01-230-731
Standard	UL 61010-2-201
Approbations	UL, cUL, CE

## Notes

