### Control Panel VARAN ETV 1521



Performance Data Touch Unit

### with 15" XGA TFT color display

The ETV Control Panel combines control, operation and visualization in a single unit. Local as well as decentralized I/O systems can be connected over the VARAN bus and therefore not bound to a specific topology when constructing your system.

The available interface connections can be programmed completely from the application. The internal CompactFlash card serves as a storage medium for the operating system, application and application data. Naturally, the panel can also be configured with the LASAL SCREEN Editor.

Display	15″ TFT color display XGA, 1024 x 768	
Data buffer	lithium battery	
Signal generator	yes	
Real-time clock	yes	
Cooling	passive (fanless)	

#### Electrical Requirements

9	Supply voltage	minimum +18 V DC	maximum +30 V DC
			A (at +24 V) devices connected)
	Inrush current	maximum 20 A for < 5 ms	

Terminal			
	Dimensions	380 mm x 310 mm x 49 mm (W x H x D)	
	Material	cover: 1 mm sheet steel, chromated (alkaline blue)	front plate: 6 mm aluminum, ano- dized (natural CO)
	Weight including mounting brackets	typically 4.9 kg	

# Control Unit Touch screen analog resistive film-glass touch panel Active surface 304.1 mm x 228.1 mm Resolution 12-bit (4096 x 4096) Signal generator yes

Display		
	Туре	15" TFT color display
	Resolution	XGA, 1024 x 768 pixels
	Color depth	18 bits (262 x 144 colors)
	Pixel size	0.297 mm x 0.297 mm
	Active surface	304.1 mm x 228.1 mm
	Backlight	2 cold cathode tubes (CCFT, switchable)
	Contrast	typically 700 : 1
	Brightness	typically 350 cd/m <sup>2</sup>
	Angle CR > 10	left and right 70°, above 65° and below 60°

### Article Number and Miscellaneous

	Article number	12-230-1521	
	Hardware version	1.x	
	Standard	UL (E247993)	
	Software macro	LSE LASAL operating system	

Σ	CONTROL PANEL	
	LASAL operating system	

## Processor AMD Geode LX 800 Cache 128-kbyte 1<sup>st</sup> Level 128-kbyte 2<sup>nd</sup> Level BIOS INSYDE BIOS SDRAM (S0-DIMM 200-pin) 128-Mbyte (optional to 512-Mbyte) (16-Mbyte "shared memory" for the graphic controller) CompactFlash (Type I) 1-Gbyte SRAM S12-kbyte (battery buffered) Interfaces 1x CAN bus

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	Interfaces	1x CAN bus 1x DIAS bus 2x VARAN bus 1x Ethernet 10/100 Mbit 2x USB V1.1 Type-A (front and back)	
	Internal interface connections and devices	1x TFT color display and inverter 1x Touch 1x CompactFlash socket	
	Control panel	touch screen (analog resistive)	

### **Environmental Conditions**

Storage temperature-20 +60 °COperating temperature0 +45 °C		+60 °C	
		-45 °C	
Humidity	10-95 %, no	10-95 %, non condensing	
EMC tolerance EN 61000-6-2 (industrial area): EMC		: EMC resistance noise emission	
Vibration tolerance	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: IP54 cover: IP20	

Notes



