

VT3-V8

8-inch VGA TFT Colour Touch Panel



SPECIFICATIONS

Model		VT3-V8		
General specifications	Current consumption		950mA or less	
	Structure		Panel built-in type, IP65f equivalent dust-proof, waterjet-proof on only front panel	
	Overvoltage category		I	
	Pollution degree		2	
	Power voltage		24 VDC \pm 10%	
	Noise resistance		1500 Vp-p pulse width 1 μ s 50 ns (common mode, based on noise simulator)	
	Withstand voltage		1500 VAC 1 minute (between power terminal and housing)	
	Insulation resistance		50 M Ω or more tested by 500 VDC megohmmeter (between power terminal and housing)	
	Vibration resistance	Intermittent vibration	Frequency: 5 to 9 Hz	Half amplitude: 3.5 mm ¹
			Frequency: 9 to 150 Hz	Acceleration: 9.8 m/s ² ¹
		Continuous vibration	Frequency: 5 to 9 Hz	Half amplitude: 1.75 mm ¹
			Frequency: 9 to 150 Hz	Acceleration: 4.9 m/s ² ¹
	Ground		—	
	Operating environment		Minimal amount of dust and corrosive gas present	
	Ambient operating temperature		0 to +50°C	
	Ambient operating humidity		35 to 85%RH (No condensation) ²	
Ambient storage temperature		-10 to +60°C (No freezing)		
Ambient storage humidity		35 to 85%RH (No condensation) ²		
Weight		Approx 1250 g		
Performance specifications	Displaypanel	Display elements	TFT colour LCD	
		Display colour	32768 colours	
		Number of points displayed	W 640 \times H 480 points	
		Active display area	W 170.9 \times H 128.2 mm	
		Service life (normal temperature and humidity)	Approx 50000 h	
	Backlightlamp	System	White LED (Not replaceable) ³	
		Life-span	Approx 50000 h	
	Touchswitch	Number of switches	40 \times 30/screen	
		System	Matrix resistive film	
		Operating force	0.98N or less	
		Life-span	1,000,000 times or more	
		External calibration input signal	—	
	Screen data internal memory	Memory capacity	12 MB (memory extension enabled)	
		Number of pages that can be registered	Up to 1024 pages	
		Number of screens that can be registered	Up to 1024 screens	
			Page No.: 0 to 8999, Global window No.: G000 to G999, Report screen P.00 to P.15	
	Data backup	Screen data	Flash ROM can be erased 100000 times.	
		Recording data	SRAM backup:lithium battery	
	Character font		Outline font, Bitmap font, Stroke font Windows font, IMAGE font, Small font	
	Calendar timer		Accuracy: \pm 40s/month (25°C), Backup:lithium battery (5 years above of service life at 25°C)	
	Communication function	PLC host link	KEYENCE, Mitsubishi Electric, OMRON, Sharp, Fuji Electric FA Components & Systems, Yaskawa Electric, Hitachi, Panasonic Electric Works, JTEKT (Toyota), Koyo Electronics Industries, Yokogawa Electric, Toshiba, Toshiba Machine, Fanuc, GE Fanuc Automation, Rockwell I (Allen Bradley), Siemens	
		Thermostat	Yokogawa Electric, Azbil (Yamatake), OMRON, RKC Instrument, Shinko Technos, CHINO	
		Inverter	Mitsubishi Electric, Fuji Electric FA Components & Systems, Yaskawa Electric, OMRON	
Servo amplifier		Mitsubishi Electric		
Stepping motor		Oriental Motor		
Robot controller		IAI		
Eco-power meter		Panasonic Electric Works		
General-purpose communication		Based on specific commands		
Grip switch	Life-span	—		

Arrow keys				
I/O specifications	Serial I/F (PORT 1: SERIAL) for connecting PCs	Applied standard	Conforms to EIA RS-232C	
		Synchronisation between the transmitter and receiver	Start-stop, full duplex	
		Communication distance	15m	
		Data length	7 or 8 bits	
		Parity	Even, odd, none	
	Communication speed	1,200, 2,400, 4,800, 9,600, 19,200, 38,400, 57,600, 115,200 bps		
	Serial I/F (PORT 2) for connecting PLC/external devices	Applied standard	Conforms to EIA RS-232C and RS-422A	
		Synchronisation between the transmitter and receiver	Start-stop, full duplex	
		Communication distance	15m (RS-232C)/500m (RS-422A)	
		Data length	7 or 8 bits	
		Parity	Even, odd, none	
	Communication speed	1,200, 2,400, 4,800, 9,600, 19,200, 38,400, 57,600, 115,200 bps		
	Serial I/F (PORT 3) for connecting barcode/PLC/external devices	Applied standard	Conforms to EIA RS-232C ⁴	
		Synchronisation between the transmitter and receiver	Start-stop, full duplex	
		Communication distance	15 m ⁵	
		Data length	7 or 8 bits	
		Parity	Even, odd, none	
	Communication speed	1,200, 2,400, 4,800, 9,600, 19,200, 38,400, 57,600, 115,200 bps		
	Serial I/F (PORT 4) for connecting MegaLink/multi-link/KL-link/external devices	When connected through MegaLink	Applied standard	RS-485
			Synchronisation between the transmitter and receiver	Start-stop, half duplex
Communication speed			19,200 bps, 115,200 bps, 0.5 Mbps, 1 Mbps, 2 Mbps	
Cable connection			Multi-drop (branching is not possible)	
Maximum number of connectable units			15	
Baud rate 19200			Maximum extension distance: 1,000 m	
Baud rate 115200				
Baud rate 0.5 M			Maximum extension distance: 500 m	
Baud rate 1 M			Maximum extension distance: 200 m	
Baud rate 2 M		Maximum extension distance: 100 m		
When connected through VT2 multi-link		Applied standard	RS-485	
		Synchronisation between the transmitter and receiver	Start-stop, half duplex	
		Communication distance	Maximum extension distance: 500 m or less	
		Communication speed	19200, 115200, 0.5M, 1M bit/s	
		Baud rate 115200 or less	Maximum extension distance: 500 m	
		Baud rate 0.5 M	Maximum extension distance: 100 m	
		Baud rate 1 M	Maximum extension distance: 50 m	
When connected through multi-link		Applied standard	RS-485	
		Synchronisation between the transmitter and receiver	Start-stop, half duplex	
		Communication distance	Maximum extension distance: 500 m or less	
When linked with the KL		Communication speed	19200, 38400, 57600, 115200 bit/s	
		Sign system	f, f/2 encoding	
		Control method	Autonomous distributed token bus control	
		Cable connection	T-shaped branch, multi-drop	
		Communication speed	5 Mbps, 2.5 Mbps, 625 kbps, 156 kbps	
		Communication media	Dedicated cable KPEV-SB (1 pc; 2-core shielded twisted pair cable [stranded wire]) * Conductor section area: 0.5 to 1.25 mm ²	
		Maximum number of connectable units	129 units (including the master station, not including the KL-T1)	
		Error control	Vertical parity, checksum, double sampling, burst noise detection	
	Baud rate 5 Mbit/s: Maximum base length	50 m		
	Baud rate 5 Mbit/s: Maximum branch wire length	20 m		
	Baud rate 2.5 Mbit/s: Maximum base length	120 m		
	Baud rate 2.5 Mbit/s: Maximum branch wire length	40 m		
	Baud rate 625 kbit/s: Maximum base length	500 m		
	Baud rate 625 kbit/s: Maximum branch wire length	150 m		
	Baud rate 156 kbit/s: Maximum base length	1200 m		

			Maximum base length	
			Baud rate 156 kbit/s: Maximum branch wire length	350 m
			Communication cable conductor section area 0.5 mm ²	Maximum extension distance: 1,000 m
			Communication cable conductor section area 0.75 mm ²	Maximum extension distance: 1,200 m
			Communication cable conductor section area 0.9 mm ²	
			Communication cable conductor section area 1.25 mm ²	

^{*1} Conforms to JIS B 3502, IEC61131-2

Number of sweeps: 10 times respectively in the X, Y, and Z directions (100 minutes)

^{*2} When the ambient temperature is higher than 40°C, please use it in the condition of an absolute humidity of 85%RH at 40°C.

^{*3} Cold-cathode tube (Replaceable)

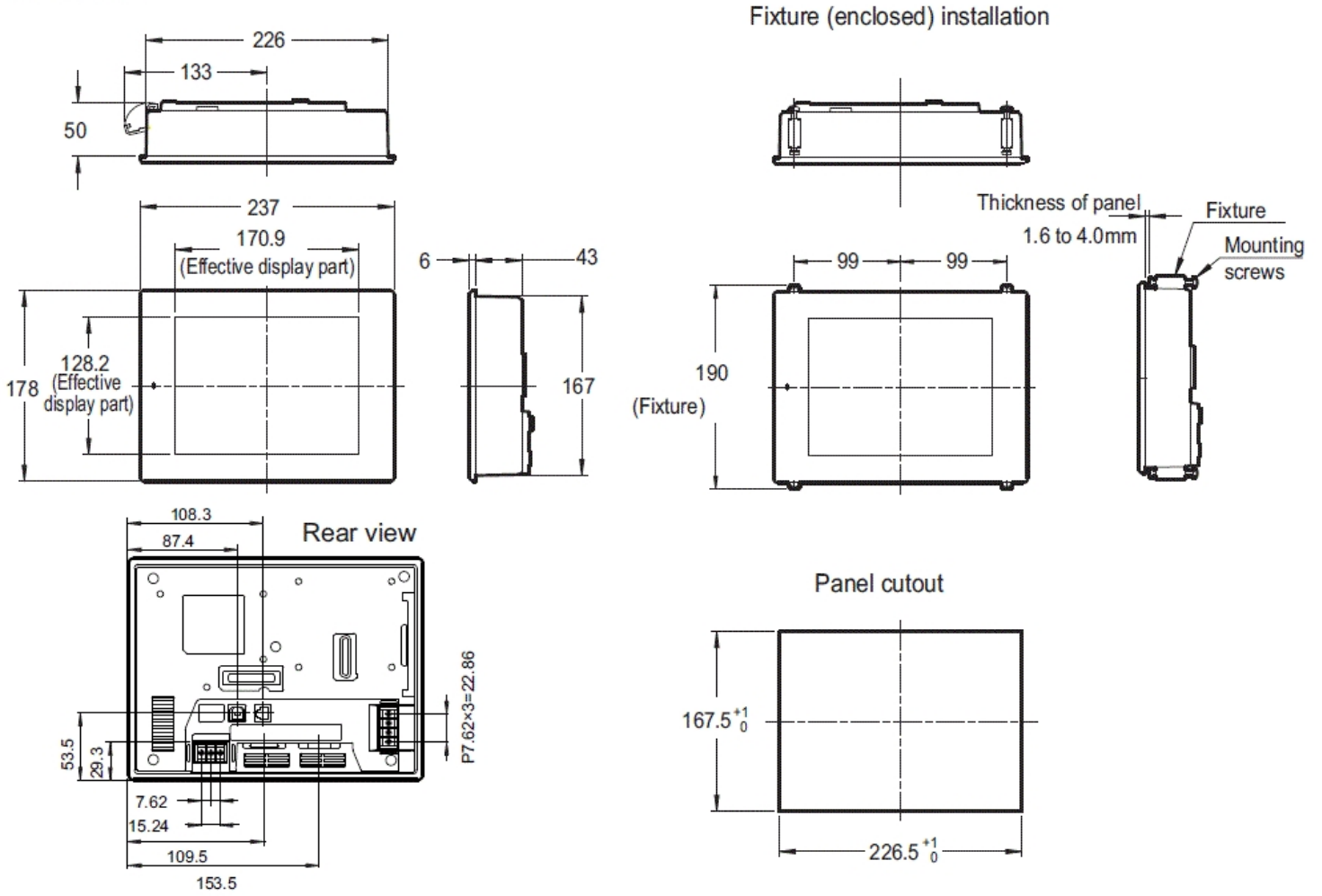
^{*4} Pin number 9 is assigned to 5 VDC. Do not connect this pin when connecting to a PLC or to a type of barcode reader that supplies a dedicated power source.

^{*5} This is when a separate power supply is used for the barcode reader and when a PLC is connected.

Dimensions

* Download CAD file or product manual for larger image/text and more detail.

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in: mm