

Millenium 3 accessories

→ Programmable touch panels MTP6/50, MTP8/50 and MTP8/70

- TFT-LCD compact resistive touch panels, 65536 colors, LED backlight
- Wide viewing angle: 70° horizontally and vertically
- Fan-less cooling system
- Text, data, graphic, animation display
- Processing of alarms and recipes
- 400 MHz core logic, 64 MB RAM
- Direct communication via the Millenium 3 programming port
- Programmable with user-friendly EB software (compatible with Windows 2000/XP/Vista/7)



MTP8/70

MTP6/50 - MTP8/50



Main differentiating characteristics

	MTP6/50	MTP8/50	MTP8/70
Size of display	4.3"	4.3"	7"
Graphical resolution	480 x 272 pixels	480 x 272 pixels	800 x 480 pixels
Storage	128 MB flash memory	128 MB flash memory	128 MB flash memory + SD card slot
Programming	USB Client port	Ethernet port	Ethernet port USB Client port
Communication	RS232/RS485 serial port	RS232/RS485 serial port Ethernet port	2 RS232/RS485 serial ports Ethernet port
Sound output	-	-	yes

Part numbers

Type	Designation	Size	Programming	Connection	Code
RD	MTP6/50 user kit (fixing brackets, MTP-M3 cable)	4.3"	USB-MiniUSB cable	Direct connection M3-MTP Modbus RS232/RS485 serial port	88970492
	MTP8/50 user kit (fixing brackets, MTP-M3 cable)	4.3"	Ethernet RJ45 crossover cable	Direct connection M3-MTP Modbus RS232/RS485 serial port, Ethernet TCP/IP port	88970494
RD	MTP8/70 user kit (fixing brackets, MTP-M3 cable)	7"	USB-MiniUSB cable or Ethernet RJ45 crossover cable	Direct connection M3-MTP 2 Modbus RS232/RS485 serial ports, USB port, Ethernet TCP/IP port	88970496
PA	MTP6/50-MTP8/70 programming kit – USB-MiniUSB connection (EB/helpfile CD, USB-MiniUSB cable)	-	-	-	88970501
	MTP8/50-MTP8/70 programming kit – Ethernet crossover connection (EB/helpfile CD, RJ45 crossover cable)	-	-	-	88970502

Accessories

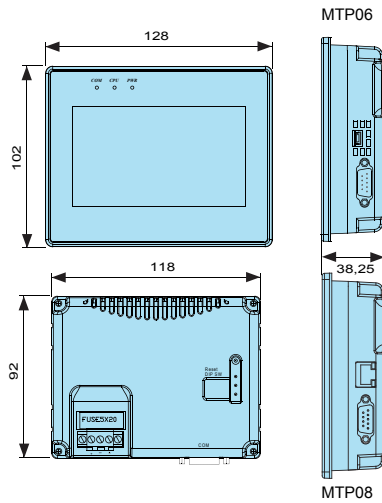
Type	Designation	Code
MA	Modbus cable for MTP6/50 & MTP8/50	88970503
MA	Modbus cable for MTP8/70	88970504

General characteristics

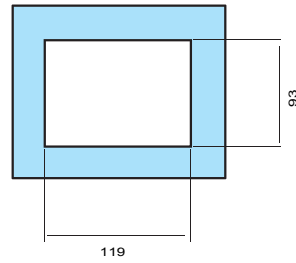
Environmental characteristics		
Certifications		UL, cUL
Conformity to standards		CEI 61000-4
Operating temperature		0 → +45 °C
Storage temperature (°C)		-20 → +60 °C
Relative humidity		10 → 90 % (operation)
Protection rating		IP65 - Dust and droplets Front panel seal watertight at standard
Vibration resistance		10 - 25 Hz, 2G 30 minutes in each of the X, Y, Z axes
Shock resistance		Free fall from 1 meter in each of the X, Y, Z axes
Electrical characteristics		
Supply voltage		24 V $\overline{\text{---}}$ Internal insulation via transformer
Voltage limits		19.2 → 28.8 V $\overline{\text{---}}$
Consumption		7.2 W max.
Mechanical characteristics		
Dimensions (l x h x w)	MTPx/50	128 x 102 x 38 mm Useful screen area: 95 x 54 mm
	MTP8/70	200 x 146 x 42.5 mm Useful screen area: 154 x 93 mm
Panel cut-out	MTPx/50	119 x 93 mm
	MTP8/70	192 x 138 mm
Panel thickness		1 → 10 mm
Mounting		Built-in, fixing by 2 screw clamps (supplied) for 1 to 10 mm panel
Connection		Removable 3-pin screw terminal block (supplied)
Weight	MTPx/50	~ 300 g
	MTP8/70	~ 800 g
Display characteristics		
Description	MTP6/50, MTP 8/50 and MTP8/70	TFT-LCD polychrome, 65536 colors LED backlight 400 MHz core logic, 64 MB RAM 128 MB flash memory (programs and recipes backup) Programmable with EB software Touch panel with user-definable layout Key life: 1 million operations minimum
	MTPx/50	4.3" Resolution 480 x 272 pixels
	MTP8/70	7" Resolution 800 x 480 pixels SD card memory slot and USB Host port
Display details		Straight lines, free lines, squares, ovals, arcs, polygons, bitmaps, animations.gif, standard fonts
Functions		Buttons, switches, levers, LEDs, messages, data, password-secured buttons, triggers Bar charts, linear gauges, clocks, alphanumeric keyboards, graphics, recipes, alarm lists Text scrolling, multiple windows, data transfer, multiple language Archive
Communication	MTP6/50, MTP 8/50 and MTP8/70	Direct connection M3-MTP (cable supplied) Modbus RS485 connection: 2/4 cables (accessory)
	MTP8/50 and MTP8/70	Modbus TCP/IP connection (Ethernet port)
Programming	MTP6/50	PC-MTP6/50 connection via USB-MiniUSB cable (accessory)
	MTP8/50	PC-MTP8/50 connection via Ethernet RJ45 cross-over cable (accessory)
	MTP8/70	PC-MTP8/70 connection via USB-MiniUSB cable (accessory) or via Ethernet RJ45 cross-over cable (accessory)
Real-time clock		Uses Millenium 3 clock or built-in clock

Dimensions (mm)

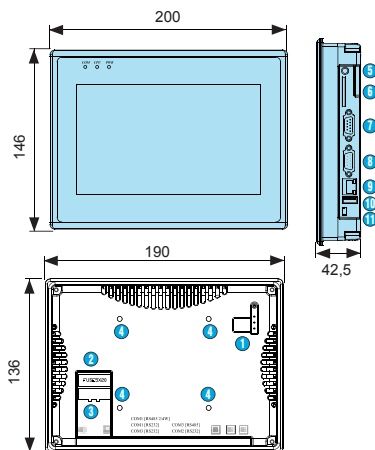
MTP6/50 and MTP8/50



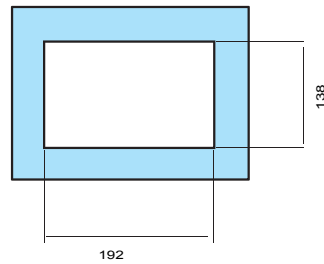
Panel cut-out



MTP8/70



Panel cut-out



- ① DIP SW & Reset button
- ② Fuse
- ③ Power connector
- ④ VESA 75 mm screw holes
- ⑤ Audio
- ⑥ SD card slot
- ⑦ Com1 RS485, Com3 RS485, Com3 RS232
- ⑧ Com1 RS232, Com2 RS232
- ⑨ Ethernet port (RJ-45)
- ⑩ USB Host port
- ⑪ USB client port (programming)

Millenium 3 accessories



→ Millenium 3 Virtual Display

- Enables an operator to visualize the Millenium 3 Display on a mobile device (smartphone, tablet, PC)
- Makes the development and configuration of Millenium 3 applications easy
- Allows remote monitoring of an equipment
- Makes the display of the Millenium 3 accessible even when the device is out of reach
- Available for Millenium 3 controllers with and without display
- The connection between the Millenium 3 and the device is made via a Bluetooth® interface or via a USB cable
- The Millenium 3 Bluetooth® interface is filtered with its unique MAC address (for the Android version)
- Available in a Standard and Lite Version. The Standard Version allows the use of all keys while the Lite Version allows the use of all keys with the exception of the ESC and OK keys
- Android version downloadable on Google Play; Windows XP/7 downloadable on www.crouzet.com



Part numbers

Type	Description	Code
Android	Millenium 3 Virtual Display Lite	MVD-AND-L
	Millenium 3 Virtual Display Standard	MVD-AND-S
Windows XP/7	Millenium 3 Virtual Display Lite	MVD-PCW-L
	Millenium 3 Virtual Display Standard	MVD-PCW-S

Accessories

Type	Description	Code
PA	USB cable 3 m: PC → Millenium 3	88970109
PA	Millenium 3 interface → Bluetooth® (class A 10 m)	88974104

Comments

- Compatible with:
- Android v2.2 and more (use the SPP Bluetooth® profile)
 - Windows XP or Windows 7 (32 or 64 bit) (Bluetooth® or USB connection)

Principles

Standard Version



Lite Version



Millenium 3 accessories

→ Remote LCD displays/keypads

- Direct link with Millenium 3 via cable
- Highlight the data and parameters information of your automation application
- Backlit LCD screen with 4 lines of 18 characters and keypad with 6 keys or 10 keys and 4 LEDs
- Direct communication with the Millenium 3 via the programming port
- Plug and play: no additional software (the function keys and LEDs are controlled by the M3 Soft SLIn/ SLOut function blocks)
- Check bit for controlling communication
- Universal screen compatible with any Millenium 3 logic controller (standard, budget, expandable, bare board, resin board)



Remote LCD screen/keypad



Remote LCD screen/keypad + 4 function keys + 4 LEDs

Part numbers

Type	Designation	Code
RD1	Remote LCD screen/keypad Kit with remote LCD screen/keypad + 3 m cable	88970410 88970412
RD2	Remote LCD screen/keypad + 4 function keys + 4 LEDs Kit with remote LCD screen/keypad + 4 function keys + 4 LEDs + 3 m cable	88970411 88970413

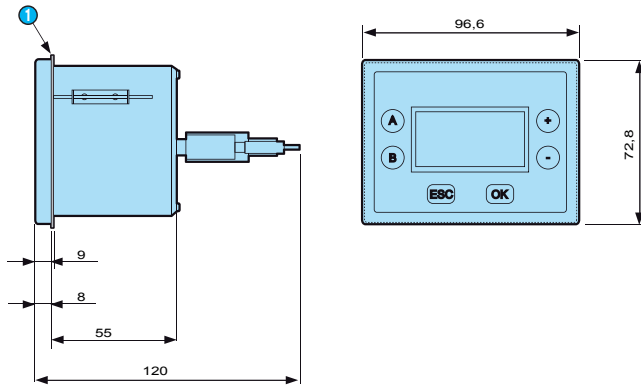
Accessories

Type	Designation	Code
MA	IP65 protective membrane (in accordance with DIN 40050 and EN60529)	88970414
PA	3 m serial link cable: PC → Millenium 3	88970102
PA	1.80 m serial link cable: DB9 M / DB9 F	88970123

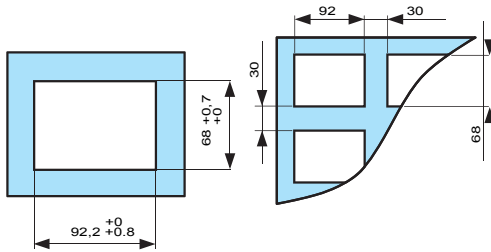
General characteristics

Environmental characteristics	
Certifications	CE
Dimensions (l x h x w)	96.6 x 72.8 x 63 mm
Panel cut-out	92 x 68 mm
Protection rating	IP54 on front panel IP20 on rear panel
Electrical characteristics	
Supply voltage	24 V $\overline{\text{---}}$ (the power supply has to be common with the Millenium 3 power supply)
Voltage limits	- 20 %/+ 25 % or 19.2 → 30 V $\overline{\text{---}}$ (including ripple)
Consumption	1.5 W (88970410) 2 W (88970411)
Protection against polarity inversions	yes
Mechanical characteristics	
Mounting	Flush-mounted, fixed with 2 clips (supplied)
Display protection	Polyester
Keyboard material	Polyester
Housing material	Self-extinguishing UL94V1
Connection	Removable 2-pin terminal
Connection	Serial via 9-pin male SUB D connector
Cable length	3 m maximum
Display characteristics	
Cycle time	20 ms + 2 Millenium 3 Controller cycles (88970410 and 88970412) 50 ms + 10 Millenium 3 Controller cycles (88970411 and 88970413)
Comments	
If using a remote display/keypad with a Millenium 3 resin board version, order the DB9/DB9 serial link cable separately (Part no. 88970123)	

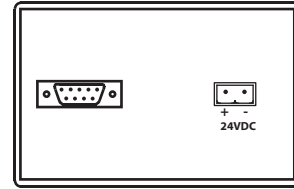
Dimensions (mm)



① Seal



Backside



Millenium 3 accessories

→ Remote LED display - Input 0-10 V

- Highlight the data of your automation application
- Display (36 x 72 mm) with 4 x 14 mm red digits
- Configurable display range
- 0-10 V input
- IP65 degree of protection on front panel



Part numbers

Type	Description	Supply	Code
RD	Display with 4 x 14 mm red digits	24 V $\overline{\text{---}}$	88950400

General characteristics

Environmental characteristics	
Certifications	CE, UL
Conformity to standards	IEC/EN 61000-6-4, IEC/EN 61010-1
Protection rating	In accordance with IEC/EN 60529: IP65 on front panel IP20 on rear
Operating temperature	-10 → +55 °C
Dimensions (l x h x w)	36 x 72 x 61 mm
Panel cut-out	71 x 29 mm
Electrical characteristics	
Supply	24 V $\overline{\text{---}}$
Tolerance	± 10 %
Consumption	< 1 W
Input voltage	0 → 10 V $\overline{\text{---}}$
Mechanical characteristics	
Mounting	Flush-mounted
Connection	Terminal block
Display characteristics	
Height of digits	14 mm
Number of digits	4
Colour	Red
Range	-1999...5999 with selectable decimal point
Device accuracy (full scale)	≤ ± 0.3 % of interval
Comments	
Can be connected directly to an analog output or via a PWM/0-10 V converter	

Dimensions (mm)

