

SIMATIC HMI MTP1900, Unified Comfort Panel, touch operation, 18.5" widescreen TFT display, 16 million colors, PROFINET interface, configurable from WinCC Unified Comfort V16, contains open-source software, which is provided free of charge See enclosed Blu-Ray



Figure similar

General information	
Product type designation	MTP1900 Unified Comfort
Display	
Design of display	TFT
Screen diagonal	18.5 in
Display width	408.96 mm
Display height	230.04 mm
Number of colors	16 777 216
Resolution (pixels)	
• Horizontal image resolution	1 920 Pixel
• Vertical image resolution	1 080 Pixel
Backlighting	
• MTBF backlighting (at 25 °C)	50 000 h; At 25°C
• Backlight dimmable	Yes; 10 ... 100%
Control elements	
Keyboard fonts	

• Numeric keyboard	Yes; Onscreen keyboard
• alphanumeric keyboard	Yes; Onscreen keyboard
<b>Touch operation</b>	
• Design as multi-touch screen	Yes
<b>Installation type/mounting</b>	
Mounting position	vertical
Mounting in portrait format possible	Yes
Mounting in landscape format possible	Yes
maximum permissible angle of inclination without external ventilation	35°
<b>Supply voltage</b>	
Type of supply voltage	DC
Rated value (DC)	24 V
permissible range, lower limit (DC)	19.2 V
permissible range, upper limit (DC)	28.8 V
<b>Input current</b>	
Current consumption (rated value)	1.2 A
Current consumption, max.	1.7 A
Starting current inrush I <sup>2</sup> t	0.5 A <sup>2</sup> ·s
<b>Memory</b>	
Flash	Yes
RAM	Yes
<b>Type of output</b>	
<b>Acoustics</b>	
• Buzzer	Yes
• Speaker	No
<b>Time of day</b>	
<b>Clock</b>	
• Hardware clock (real-time)	Yes
• Software clock	Yes
• retentive	Yes; Back-up duration typically 6 weeks
• synchronizable	Yes
<b>Interfaces</b>	
Number of industrial Ethernet interfaces	2; 2 ports (switch) + independent port
Number of RS 485 interfaces	1; RS 422 / 485 combined
Number of RS 422 interfaces	0; together with RS 485
Number of USB interfaces	4; USB 3.0
Number of SD card slots	2
<b>Industrial Ethernet</b>	
• Industrial Ethernet status LED	2

- Number of ports of the integrated switch 2

## Protocols

PROFINET	Yes
Supports protocol for PROFINET IO	No
PROFIBUS	No
<b>Protocols (Ethernet)</b>	
• TCP/IP	Yes
• DHCP	Yes
• SNMP	Yes
• DCP	Yes
• LLDP	Yes
<b>Redundancy mode</b>	
<b>Media redundancy</b>	
— MRP	Yes

## EMC

<b>Emission of radio interference acc. to EN 55 011</b>	
• Limit class A, for use in industrial areas	Yes
• Limit class B, for use in residential areas	No

## Degree and class of protection

IP (at the front)	IP65
IP (rear)	IP20
<b>NEMA (front)</b>	
• Enclosure Type 4x at the front	Yes
• Enclosure Type 12 at the front	Yes

## Standards, approvals, certificates

CE mark	Yes
cULus	Yes
RCM (formerly C-TICK)	Yes
KC approval	No; Available soon
EAC (formerly Gost-R)	Yes

<b>Use in hazardous areas</b>	
• ATEX Zone 2	No; Available soon
• ATEX Zone 22	No; Available soon
• IECEx Zone 2	No; Available soon
• IECEx Zone 22	No; Available soon
• cULus Class I Zone 2, Division 2	No; Available soon
• cULus Class II Division 2	No
• FM Class I Division 2	No; Available soon
• FM Class II Division 2	No

## Marine approval

• Germanischer Lloyd (GL)	No; Available soon
• American Bureau of Shipping (ABS)	No; Available soon
• Bureau Veritas (BV)	No; Available soon
• Det Norske Veritas (DNV)	No; Available soon
• Lloyds Register of Shipping (LRS)	No; Available soon
• Nippon Kaiji Kyokai (Class NK)	No; Available soon
• Chinese Classification Society (CCS)	No; Available soon

### Ambient conditions

Suited for indoor use	Yes
Suited for outdoor use	No

### Ambient temperature during operation

• Operation (vertical installation)	
— For vertical installation, min.	0 °C
— For vertical installation, max.	50 °C
• Operation (max. tilt angle)	
— At maximum tilt angle, min.	0 °C
— At maximum tilt angle, min.	40 °C
• Operation (vertical installation, portrait format)	
— For vertical installation, min.	0 °C
— For vertical installation, max.	40 °C
• Operation (max. tilt angle, portrait format)	
— At maximum tilt angle, min.	0 °C
— At maximum tilt angle, min.	35 °C

### Ambient temperature during storage/transportation

• min.	-20 °C
• max.	60 °C

### Relative humidity

• Operation, max.	90 %; no condensation
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### Operating systems

proprietary	Yes
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### Configuration

Message indicator	Yes
Alarm system (incl. buffer and acknowledgment)	Yes
Recipe management	Yes

### Configuration software

• WinCC Unified Comfort Engineering (TIA Portal)	Yes
• WinCC Unified PC Engineering (TIA Portal)	Yes

### Languages

Online languages	
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• Number of online/runtime languages	32
<b>Project languages</b>	
• Languages per project	32
<b>Functionality under WinCC Unified</b>	
Libraries	Yes
JavaScript	Yes
<b>Message system</b>	
• Number of alarm classes	32
• Bit messages	
— Number of bit messages	9 000
• Analog messages	
— Number of analog messages	300
• S7 alarm number procedure	Yes
• System messages HMI	Yes
• System messages, other (SIMATIC S7, Sinumerik, Simotion, etc.)	Yes
• Number of characters per message	512
• Number of process values per message	10
• Acknowledgment groups	Yes
• Message indicator	No
• Message buffer	Yes; Configured as alarm archive
— Circulating buffer	Yes
— retentive	Yes
— maintenance-free	Yes
<b>Parameter set management (recipes)</b>	
• Number of parameter set types	750
• Parameter sets per parameter set type	2 000
• Entries per parameter set	1 000
• Parameter set memory expandable	Yes
<b>Variables</b>	
• Number of variables per device	8 000
• Number of variables per screen	800
• Limit values	Yes
• Structures	Yes
• Arrays	Yes
<b>Images</b>	
• Number of configurable images	1 200
• Faceplate	Yes
<b>Complex image objects</b>	
• Number of complex objects per screen	80
• Alarm view	Yes

• Trend view	Yes
• User view	Yes
• Status/control	No
• Parameter set display	Yes
• HTML browser	Yes
• Bar graphs	Yes
• Sliders	Yes
• Pointer instruments	Yes
• Analog/digital clock	Yes
<b>Lists</b>	
• Number of text lists per project	750
• Number of entries per text list	750
• Number of graphics lists per project	750
• Number of entries per graphics list	750
<b>Archiving</b>	
• Number of archives per device	50
• Number of entries per archive	500 000
• Message archive	Yes
• Process value archive	Yes
• Archiving methods	
— Sequential archive	Yes
— Short-term archive	Yes
• Memory location	
— Memory card	Yes
— USB memory	Yes
— Ethernet	No
<b>Transfer (upload/download)</b>	
• USB	No
• Ethernet	Yes
• using external storage medium	No
<b>Service tools/configuration aids</b>	
• Backup/Restore manually	Yes
• Backup/Restore automatically	Yes
• Simulation	Yes
• Device switchover	Yes
<b>Peripherals/Options</b>	
Peripherals	Printer, barcode reader
Printer	Yes
SIMATIC HMI MM memory card: Multi Media Card	No
SIMATIC HMI SD memory card: Secure Digital memory card	Yes

SIMATIC HMI CF memory card Compact Flash Card	No
USB memory	Yes
SIMATIC IPC USB Flashdrive (USB stick)	Yes
SIMATIC HMI USB stick	Yes
Network camera	No

#### Mechanics/material

Enclosure material (front)	
• Aluminum	Yes

#### Dimensions

Width of the housing front	464 mm
Height of housing front	294 mm
Mounting cutout, width	448 mm
Mounting cutout, height	278 mm
Overall depth	73 mm

#### Weights

Weight without packaging	5.5 kg
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**last modified:** 06/12/2020