

SIMATIC HMI MTP700, Unified Comfort Panel, neutral, touch operation, 7" 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	MTP700 Unified Comfort
Display	
Design of display	TFT
Screen diagonal	7 in
Display width	152.4 mm
Display height	91.4 mm
Number of colors	16 777 216
Resolution (pixels)	
<ul style="list-style-type: none"> <li>Horizontal image resolution</li> </ul>	800 pixel
<ul style="list-style-type: none"> <li>Vertical image resolution</li> </ul>	480 pixel
Backlighting	
<ul style="list-style-type: none"> <li>MTBF backlighting (at 25 °C)</li> </ul>	50 000 h; At 25°C
<ul style="list-style-type: none"> <li>Backlight dimmable</li> </ul>	Yes; 5-100 %
Control elements	
Keyboard fonts	
<ul style="list-style-type: none"> <li>Numeric keyboard</li> </ul>	Yes; Onscreen keyboard
<ul style="list-style-type: none"> <li>alphanumeric keyboard</li> </ul>	Yes; Onscreen keyboard
Touch operation	
<ul style="list-style-type: none"> <li>Design as touch screen</li> </ul>	Yes
<ul style="list-style-type: none"> <li>Design as multi-touch screen</li> </ul>	Yes
Installation type/mounting	
Mounting position	vertical
Mounting in portrait format possible	Yes
Mounting in landscape format possible	Yes
maximum permissible angle of inclination without external ventilation	35°
Supply voltage	
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
Input current	
Current consumption (rated value)	0.45 A
Current consumption, max.	1 A
Starting current inrush I <sub>t</sub>	0.5 A <sup>2</sup> ·s

Memory	
Flash	Yes
RAM	Yes
Type of output	
Acoustics	
• Buzzer	Yes
• Speaker	No
Time of day	
Clock	
• Hardware clock (real-time)	Yes
• Software clock	Yes
• retentive	Yes; Back-up duration typically 6 weeks
• synchronizable	Yes
Interfaces	
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 3.1 Gen. 1 (type A)
Number of SD card slots	2
Industrial Ethernet	
• Industrial Ethernet status LED	2
• Number of ports of the integrated switch	2
Protocols	
PROFINET	Yes
Supports protocol for PROFINET IO	No
Protocols (Ethernet)	
• TCP/IP	Yes
• DHCP	Yes
• SNMP	Yes
• DCP	Yes
• LLDP	Yes
Redundancy mode	
Media redundancy	
— MRP	Yes
EMC	
Emission of radio interference acc. to EN 55 011	
• 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
NEMA (front)	
• Enclosure Type 4x at the front	Yes
• Enclosure Type 12 at the front	No
Standards, approvals, certificates	
CE mark	Yes
cULus	Yes
RCM (formerly C-TICK)	Yes
KC approval	Yes
EAC (formerly Gost-R)	Yes
Use in hazardous areas	
• 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
<b>Marine approval</b>	
• 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
<b>Ambient conditions</b>	
Suited for indoor use	Yes
Suited for outdoor use	No
<b>Ambient temperature during operation</b>	
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
<b>Ambient temperature during storage/transportation</b>	
• min.	-20 °C
• max.	60 °C
<b>Relative humidity</b>	
• Operation, max.	90 %; no condensation
<b>Operating systems</b>	
proprietary	Yes
<b>configuration / header</b>	
Message indicator	Yes
Alarm system (incl. buffer and acknowledgment)	Yes
Recipe management	Yes
<b>Configuration software</b>	
• WinCC Unified Comfort Engineering (TIA Portal)	Yes
• WinCC Unified PC Engineering (TIA Portal)	Yes
<b>Languages</b>	
<b>Online languages</b>	
• Number of online/runtime languages	32
<b>Project languages</b>	
• Languages per project	32
<b>Functionality under WinCC Unified</b>	
Libraries	Yes
<b>Applications/options</b>	
• Writer	Yes
• Calc	Yes
• Web browser	Yes
• PDF Viewer	Yes
• Media Player	Yes
• SIMATIC WinCC Sm@rtServer	Yes
• SIMATIC WinCC Audit	No
• Unified Collaboration	Yes
Number of Visual Basic Scripts	No
JavaScript	Yes

Task planner	
• time-controlled	Yes
• task-controlled	Yes
Help system	
• Number of characters per info text	70
• Number of message texts per message	10
<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
• Size of internal parameter set memory	12 Mbyte
• Parameter set memory expandable	Yes
<b>Image objects</b>	
• Number of objects per image	800
• Picture window	Yes
• Text fields	Yes
• I/O fields	Yes
• Graphic I/O fields (graphics list)	Yes
• Symbolic I/O fields (text list)	Yes
• Scalable Vector Graphics (SVG)	Yes
• Date/time fields	Yes
• Checkbox	Yes
• Option button	Yes
• Switches	Yes
• Buttons	Yes
• Graphic display	Yes
• Icons	Yes
• Custom web display	Yes
• Geometric objects	Yes
<b>Security</b>	
• Number of roles	50
• Number of function rights	0; V16
• Number of users	200
• Password export/import	Yes
• Central user administration	Yes
<b>Process coupling</b>	
• S7-1200	Yes
• S7-1500	Yes
• S7-200	No
• S7-300/400	Yes
• Number of S7 connections	16
• LOGO!	No
• SIMOTION	No
• OPC UA Client	Yes
• OPC UA Server	Yes
• Software Controller/Open Controller	No
<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
<b>Mechanics/material</b>	

Enclosure material (front)	
• Aluminum	Yes
<b>Dimensions</b>	
Width of the housing front	214 mm
Height of housing front	158 mm
Mounting cutout, width	197 mm
Mounting cutout, height	141 mm
Overall depth	64 mm
<b>Weights</b>	
Weight (without packaging)	1.4 kg
<b>last modified:</b>	7/15/2021 