

Spare part as of 01.01.2015 the product is blocked for delivery and can no longer be ordered as a new part. For information on the successor See FAQ Entry ID: 82203106. For further questions, the familiar contact partners are available. . SIPLUS HMI TP 177B mono DP for medial exposure based on 6AV6642-0BC01-1AX1



General information	
Customer-specific configuration	Yes
Display	
Design of display	STN
Screen diagonal	5.7 in
Color display	No
Number of colors	4; Blue levels
Resolution (pixels)	
• Horizontal image resolution	320 Pixel
• Vertical image resolution	240 Pixel
Backlighting	
• MTBF backlighting (at 25 °C)	50 000 h
Control elements	
Control elements	Touch screen
Keyboard fonts	
• System keys	Yes
• alphanumeric keyboard	Yes
• hexadecimal keyboard	Yes

• Multi-key operation	No
Touch operation	
• Design as touch screen	Yes; analog, resistive
Connection type	
• Type of connection for mouse/keyboard/barcode reader	USB / USB / USB
Installation type/mounting	
Mounting position	vertical
maximum permissible angle of inclination without external ventilation	35°
Supply voltage	
Type of supply voltage	DC
Input current	
Current consumption (rated value)	0.24 A
Starting current inrush I ² t	0.5 A ² ·s
Processor	
Processor type	ARM, 200 MHz
Memory	
Type of memory	Flash / RAM
Memory available for user data	2 048 kbyte
Time of day	
Clock	
• Type	Hardware clock, synchronizable, no battery backup
• retentive	No
• synchronizable	Yes
Interfaces	
Interfaces/bus type	RS232 optional, 1 x RS422, 1 x RS485 (max. 12 Mbit/s)
Number of RS 485 interfaces	1
• Transmission rate, max.	12 Mbit/s
Number of USB interfaces	1
PC card slot	No
CF card slot	No
Multimedia card/SD card slot	combined
Industrial Ethernet	
• Industrial Ethernet interface	No
• Industrial Ethernet status LED	0
Protocols	
Protocols (terminal link)	
• Sm@rtServer	Yes

Degree and class of protection	
IP (at the front)	IP65
IP (rear)	IP20
Standards, approvals, certificates	
Certifications	CE
cULus	No
EAC (formerly Gost-R)	No
Suitable for safety functions	No
Marine approval	
<ul style="list-style-type: none"> • Germanischer Lloyd (GL) • American Bureau of Shipping (ABS) • Bureau Veritas (BV) • Det Norske Veritas (DNV) • Lloyds Register of Shipping (LRS) • Polski Rejestr Statkow (PRS) 	No
Use in hazardous areas	
<ul style="list-style-type: none"> • ATEX Zone 2 • ATEX Zone 22 • FM Class I Division 2 	No
Ambient conditions	
Ambient temperature during operation	
<ul style="list-style-type: none"> • min. • max. 	0 °C 50 °C
Ambient temperature during storage/transportation	
<ul style="list-style-type: none"> • min. • max. 	-20 °C 60 °C
Altitude during operation relating to sea level	
<ul style="list-style-type: none"> • Ambient air temperature-barometric pressure-altitude 	Tmin ... Tmax at 1 080 hPa ... 795 hPa (-1 000 m ... +2 000 m) // Tmin ... (Tmax - 10 K) at 795 hPa ... 658 hPa (+2 000 m ... +3 500 m) // Tmin ... (Tmax - 20 K) at 658 hPa ... 540 hPa (+3 500 m ... +5 000 m)
Relative humidity	
<ul style="list-style-type: none"> • Operation, max. 	100 %; RH incl. condensation/frost permitted (no commissioning in bedewed state)
Resistance	
Use in stationary industrial systems	
<ul style="list-style-type: none"> — to biologically active substances according to EN 60721-3-3 — to chemically active substances according to EN 60721-3-3 — to mechanically active substances according to EN 60721-3-3 	Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna); Class 3B3 on request Yes; Class 3C4 incl. salt spray. The supplied connector covers must remain on the unused interfaces during operation! Yes; Class 3S4 incl. sand, dust. The supplied connector covers must remain on the unused interfaces during operation!

Operating systems

pre-installed operating system	Windows CE
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Configuration

Message indicator	Yes
Alarm system (incl. buffer and acknowledgment)	Yes
Process value display (output)	Yes
Process value default (input) possible	Yes
Recipe management	Yes

Configuration software

- Configuration tool
- WinCC flexible Compact Version 2005 or higher (to be ordered separately)

Languages

Online languages

- Number of online/runtime languages
- 5

Project languages

- Languages per project
- 32

Functionality under WinCC (TIA Portal)

Libraries	Yes
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Task planner	Yes
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Help system	Yes
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- Number of characters per info text
- 70

Message system

- Number of alarm classes
- Number of messages
- Bit messages
 - Number of bit messages
- Analog messages
 - Number of analog messages
- Telegram message procedure Alarm S
- System messages HMI
- System messages PLC
- System messages, other (SIMATIC S7, Sinumerik, Simotion, etc.)
- Lines
- Number of characters per message
- Number of process values per message
- Acknowledgment groups
 - Number of acknowledgement groups
- Message indicator
- acoustic feedback
- First/last value

Recipe management	
• Number of recipes	100
• Data records per recipe	200
• Entries per data record	200
• Recipe memory	32 KB integrated Flash, expandable
Variables	
• Number of variables per device	1 000
• Number of variables per screen	50
• Number of variables	1 000
• Initial values	1 000
• Type Date & Time	1 000
• Limit values	Yes
• Multiplexing	Yes
• Structures	No
Images	
• Number of configurable images	500
• Permanent window/default	Yes
• Start screen configurable	Yes
• Image selection by PLC	Yes
• Image number in the PLC	Yes
Image objects	
• Text objects	2,500 text elements
• Number of I/O fields per image	50
• Number of date/time fields	30
• Index of screen context	No
• Return	Yes
• Graphics object	Bit maps, icons, icon (full-screen), vector graphics
— Icons	500
— Icon (full screen)	50
Complex image objects	
• Status/control	With SIMATIC S7
• dynamic objects	Diagrams, bar graphs, sliders, analog display, invisible buttons
— Number of objects per project	500
— Number of curve diagrams per image	5
• Methods	Trend
• Bar graphs	
— Number of bars per chart	5
• Sliders	
— Number of slides per image	0
• Pointer instruments	
— Number of analog indicators per image	0

• Limit value lines	Yes
• Number of alphanumerical fields	1 000
— alphanumeric fields per image	100
• Number of numerical fields	1 000
— numerical fields per image	100
• Number of password fields	1 000
• Number of visible switches per project	1 000
— visible switches per image	100
— hidden switches per image	100
• Number of status switches per project	1 000
— Number of status switches per image	100
• Number of selector switches per project	1 000
— Selector switches per image	100
• Number of decade switches per project	0
— Decade switches per image	0
• Number of signal lamps per project	1 000
— Signal lamps per image	100
Attributes for dynamic objects	
• Color change	Yes
• X/Y movement	Yes
• Hide	Yes
• Angle of rotation	No
Lists	
• Number of text lists per project	300
• Number of text lists per image	10
• Number of entries per text list	30
• Number of graphics lists per project	100
• Number of graphic lists per image	10
• Number of entries per graphics list	30
Security	
• Number of user groups	50
• Number of user rights	32
• Password export/import	Yes
Data carrier support	
• PC card	No
• CF card	No
Logging through printer	
• Recording/Printing	Alarms, report (shift report), hardcopy
Transfer (upload/download)	
• Transfer of configuration	MPI/PROFIBUS DP, serial, USB, by means of external storage medium, automatic transfer recognition
Process coupling	

• Connection to controller	S5, S7-200, S7- 300/400, Win AC, SINUMERIK, SIMOTION, Allen Bradley (DF1), Mitsubishi (FX), Telemecanique (ADJUST), Modicon (Modbus), for further non-Siemens drivers, see section on "System interfaces"
• S7-200	Yes
— PPI (point-to-point)	Yes
— PPI network	No
— MPI	Yes
— PROFIBUS DP	Yes
— Ethernet	No
• S7-300/400	Yes
— MPI	Yes
— PROFIBUS DP	Yes
— PROFINET	No
• S5	Yes; only PROFIBUS DP
— serial	No
— PROFIBUS DP	Yes
• TI 505	No
• Allen Bradley (DF1)	Yes
• Allen Bradley (DF485)	No
• Mitsubishi (FX)	Yes
• Telemecanique (ADJUST)	Yes
• OMRON (LINK/Multilink)	No
• Modicon (Modbus)	Yes

Functions

• Key repeat	No
• TAB sequence	Yes
• Calculating functions	Yes
• Animate	Yes
• Menu tree editor	Yes
• Unit switchover	No

Service tools/configuration aids

• Clean screen	Yes
• Touch calibration	Yes
• Backup/Restore manually	Yes
• Simulation	Yes
• Device switchover	Yes
• Delta transfer	Yes
• Monitoring function for battery and memory	No
• Trace (operation archive)	No

Expandability/openness

• Open Platform Program	Yes
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Peripherals/Options

Peripherals	Printer
• SIMATIC HMI MM memory card: Multi Media Card	Yes
Additional software components loadable	Yes

Dimensions

Width of the housing front	212 mm
Height of housing front	156 mm
Overall depth	44 mm

Weights

Weight (without packaging)	0.8 kg
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Other

free hotline	Yes
Warranty period	1 y
last modified:	05/16/2018