



SIPLUS HMI OP77B FOR MEDIAL STRESS BASED ON 6AV6641-0CA01-0AX1

General information	
customer-specific configuration	No
Display	
Design of display	STN
Screen diagonal	4.5 in
Size	4.5"
Display type	STN, black/white
Color type	Black/white
Resolution (pixels)	
horizontal image resolution	160
vertical image resolution	64
Resolution (WxH in pixel)	160 x 64
Backlighting	
MTBF backlighting (at 25 °C)	about 100,000 hours
Control elements	
Control elements	Membrane keyboard
Operating options	Keys
Function keys, programmable	8 function keys, 4 with LEDs
Connection for mouse/keyboard/barcode reader	- / - / -

Keyboard fonts	
Keys with LED	Yes
user-definable label membrane keys	Yes
Number of function keys with LEDs	4
Numeric/alphabetical input	Yes / Yes
hexadecimal keyboard	Yes
Multi-key operation	Yes
Touch operation	
Design as touch screen	No
Supply voltage	
Type of supply voltage	DC
Input current	
Rated current	0.2 A
Inrush current A ² s	0.5 A ² s
Processor	
Processor	ARM
Processor type	ARM
Memory	
Type	Flash / RAM
usable memory for user data	1000 KB usable memory for user data
Type of output	
Info LED	Yes
Power LED	No
Error LED	No
Time of day	
Clock	
Type	Software clock, no battery backup
Hardware clock (real-time clock)	No
Software clock	Yes
battery-backed	No
synchronizable	No
Interfaces	
Interfaces	1 x RS232, 1 x RS422, 1 x RS485 (max. 12 Mbit/s)
Number of RS 485 interfaces	1
Transmission rate, max.	12 Mbit/s
USB port	1 x USB
Multimedia card/SD card slot	combined
Special interfaces	No

Industrial Ethernet	
Industrial Ethernet interface	No
Degree and class of protection	
Front	IP65
IP (at the front)	IP65
Rear	IP20
IP (rear)	IP20
Standards, approvals, certificates	
KC approval	Yes
cULus	No
RCM (former C-TICK)	Yes
EAC (former Gost-R)	Yes
Suitable for safety functions	No
Use in hazardous areas	
EX zone 2	No
EX zone 22	No
Ambient conditions	
Mounting position	vertical
maximum permissible angle of inclination without external ventilation	+/- 80 °
Storage/transport temperature	
Transport, storage	-20 °C to +60 °C
Relative humidity	
Operation, max.	100 % ; Relative humidity, incl. condensation / frost permitted (no commissioning under condensation conditions)
Extended ambient conditions	
relative to ambient temperature-atmospheric pressure-installation altitude	Tmin ... Tmax at 1080 hPa ... 795 hPa (-1000 m ... +2000 m) // Tmin ... (Tmax - 10K) at 795 hPa ... 658 hPa (+2000 m ... +3500 m) // Tmin ... (Tmax - 20K) at 658 hPa ... 540 hPa (+3500 m ... +5000 m)
Relative humidity	
with condensation, maximum	100 % ; Relative humidity, incl. condensation / frost permitted (no commissioning under condensation conditions)
Resistance	
to biologically active substances/conformity with EN 60721-3-3	Yes ; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna). The supplied connector covers must remain on the unused interfaces during operation!
to chemically active substances/conformity with EN 60721-3-3	Yes ; Class 3C4 incl. salt spray. The supplied connector covers must remain on the unused interfaces during operation!
to mechanically active substances/conformity with EN 60721-3-3	Yes ; Class 3S4 incl. sand, dust. The supplied connector covers must remain on the unused interfaces during operation!
Operating systems	

Operating system	Windows CE
Configuration	
Configuration software	
Configuration tool	WinCC flexible Compact Version 2004 or higher (to be ordered separately)
2. Configuration kit	WinCC flexible Compact
Version	Version 2004
Configuration tool	WinCC flexible
Type	Compact
Languages	
Online languages	
Number of online/runtime languages	5
Project languages	
Languages per project	32
Functionality under WinCC (TIA Portal)	
Libraries	Yes
Task planner	Yes
Help system	Yes
Number of characters per info text	320
Message system	
Number of alarm classes	32
Number of messages	1000
Bit messages	Yes
Analog messages	Yes
Number of bit messages	1000
Number of analog messages	1000
Telegram message procedure Alarm S	Yes
System messages HMI	Yes
System messages PLC	Yes
System messages, other (SIMATIC S7, Sinumerik, Simotion, etc.)	No
Message length (in characters)	80
Number of process values per message	8
Acknowledgment groups	Yes
Message indicator	No
acoustic feedback	No
First/last value	Yes
Recipe administration	
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	1000
Number of variables per screen	30
Limit values	Yes
Multiplexing	Yes
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
I/O fields per image	30
Date/time fields	0
Index of screen context	No
Return	Yes
Graphics object	Bit maps, icons, icon (full-screen)
Icons	1000
Icon (full screen)	100
Complex image objects	
dynamic objects	Bar graphs
Number of bars per chart	5
Limit value lines	Yes
alphanumeric fields	1000
alphanumeric fields per image	30
numerical fields	1000
numerical fields per image	30
Password fields	0
Number of analog indicators per image	0
visible switches per image	0
hidden switches per image	0
Button status switches per image	0
Selector switches per image	0
Decade switches per image	0
Signal lamps per image	0

Attributes for dynamic objects	
Color change	Yes
X/Y movement	No
Hide	Yes
Angle of rotation	No
Lists	
Number of text lists per project	300
Number of graphics lists per project	0
Number of graphic lists per image	0
Number of entries per graphics list	0
Security	
Number of user groups	50
Number of user rights	32
Password export/import	Yes
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, TI 505, Win AC, Allen Bradley (DF1), Allen Bradley (DF485), Mitsubishi (FX), OMRON (LINK/Multilink), Modicon (Modbus), further non-Siemens drivers, see chapter "System interfaces"
S7-200	Yes
PPI (point-to-point)	Yes
PPI network	Yes
MPI	Yes
PROFIBUS DP	Yes
Ethernet	No
S7-300/400	Yes
MPI	Yes
PROFIBUS DP	Yes
PROFINET	No
S5	Yes
serial	Yes
PROFIBUS DP	Yes
TI 505	Yes
Allen Bradley (DF1)	Yes
Allen Bradley (DF485)	Yes

Mitsubishi (FX)	Yes
Mitsubishi (MP4)	Yes
Telemecanique (ADJUST)	No
Telemecanique (Uni-Telway)	No
OMRON (LINK/Multilink)	Yes
Modicon (Modbus)	Yes
GE-Fanuc (SNP)	Yes
Functions	
Key repeat	Yes
TAB sequence	Yes
Calculating functions	Yes
Animate	Yes
Menu tree editor	Yes
Unit switchover	No
Service tools/configuration aids	
Clean screen	No
Touch calibration	No
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	No
Peripherals/Options	
Peripherals	Printer
Multimedia Card	Yes
Dimensions	
Front of enclosure (W x H)	150 mm x 186 mm
Weights	
Weight (without packaging)	0.5 kg
Other	
free hotline	Yes
Warranty period	1 a
Status	Jul 30, 2014