



SIMATIC OP177B 6" PN/DP STN 256 COLOR DISPLAY
 TOUCH AND KEYS MPI-/PROFIBUS-DP PROTOCOL
 RS485-/RS422-/USB- INTERFACE ETHERNET -
 INTERFACE PRINTER INTERFACE SLOT FOR MM-CARD
 CONFIGURABLE WITH WINCC FLEXIBLE 2005

General information	
Product function	
Customer-specific configuration	Yes
Display	
Design of display	STN
Screen diagonal	5.7 in
Size	5.7" (120 mm x 90 mm)
Display type	STN, 256 colors
Color type	Colors
Resolution (pixels)	
Horizontal image resolution	320
Vertical image resolution	240
Resolution (WxH in pixel)	320 x 240
Backlighting	
MTBF backlighting (at 25 °C)	about 50000 hours
Control elements	
Control elements	Membrane keyboard
Operating options	Keys and Touch
Function keys, programmable	32 function keys, 26 with LEDs

Connection for mouse/keyboard/barcode reader	USB / USB / USB
Keyboard fonts	
freely inscribable membrane keys	Yes
Number of function keys with LEDs	26
Multi-key operation	Yes
Number of configurable system keys	32
System keys	Yes
Numeric/alphabetical input	Yes / Yes
hexadecimal keyboard	Yes
Multi-key operation	Yes
Touch operation	
Touch screen	Analog, resistive
Supply voltage	
Supply voltage	24 V DC
Input current	
Rated current	0.24 A
Inrush current A²s	0.5 A ² s
Processor	
Processor	ARM, 200 MHz
Processor type	ARM
Memory	
Type	Flash / RAM
Usable memory for user data	2048 KB usable memory for user data
Time of day	
Clock	
Type	Hardware clock, synchronizable, no battery backup
Interfaces	
Interfaces	RS232 optional, 1 x RS422, 1 x RS485, 1 x Ethernet (RJ45) (max. 12 Mbit/s)
Number of RS 485 interfaces	1
Transmission rate, max.	12 Mbit/s
USB port	1 x USB
PC card slot	No
CF card slot	No
Multimedia card/SD card slot	combined, as of E version 016 in conj. with WinCC flex. 2008 SP1
Special interfaces	No
Industrial Ethernet	
Industrial Ethernet interface	1 x Ethernet (RJ45)
Industrial Ethernet status LED	1

Protocols	
Protocols (terminal link)	
Sm@rtServer	Yes
Degree and class of protection	
Front	IP65, NEMA 4x, NEMA 12 (when installed)
Type of protection	IP20
IP (at the front)	IP65
NEMA	NEMA 4x, NEMA 12
Rear	IP20
Standards, approvals, certificates	
Certifications	CE, GL, ABS, BV, DNV, LRS, FM Class I Div. 2, UL, CSA, cULus, EX Zone 2, EX Zone 22, C-TICK, NEMA 4x, NEMA 12
FM Class I Div. 2	Yes
GL	Yes
ABS	Yes
BV	Yes
DNV	Yes
LRS	Yes
PRS	No
Gost-R	No
Suitable for safety functions	No
Use in hazardous areas	
EX zone 2	Yes
EX zone 22	Yes
Ambient conditions	
Mounting position	vertical
maximum permissible angle of inclination without external ventilation	+/- 35 °
Storage/transport temperature	
Transport, storage	-20 °C to +60 °C
Relative humidity	
max. relative humidity	90 %
Operating systems	
Operating system	Windows CE
Configuration	
Message indicator	Yes
With alarm logging system (incl. buffer and acknowledgment)	Yes
Process value display (output)	Yes
Process value default (input) possible	Yes

Recipe administration	Yes
Configuration software	
STEP 7 Basic (TIA Portal)	No
STEP 7 Professional (TIA Portal)	No
WinCC flexible Compact	Yes
WinCC flexible Standard	Yes
WinCC flexible Advanced	Yes
WinCC Basic (TIA Portal)	No
WinCC Comfort (TIA Portal)	Yes
WinCC Advanced (TIA Portal)	Yes
WinCC Professional (TIA Portal)	Yes
Configuration tool	WinCC flexible Compact Version 2005 or higher (to be ordered separately)
2nd configuration kit	WinCC flexible Compact
Version	Version 2005
Configuration tool	WinCC flexible
Type	Compact
Languages	
Online languages	
Number of online/runtime languages	5
Languages	
Languages per project	32
Functionality under WinCC flexible	
Libraries	Yes
Task planner	Yes
Help system	Yes
Number of characters per info text	70
With alarm logging system (incl. buffer and acknowledgment)	
Number of alarm classes	32
Number of messages	2000
Bit messages	Yes
Analog messages	Yes
Number of bit messages	2000
Number of analog messages	50
Telegram message procedure Alarm S	No
System messages HMI	Yes
System messages PLC	Yes
System messages, other (SIMATIC S7, Sinumerik, Simotion, ...)	No

Message length (in characters)	80
Lines	1
Number of process values per message	8
Acknowledgment groups	99
Message indicator	Yes
Acoustic feedback	No
First/last value	Yes
Recipes	
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	50
Number of variables	1000
Initial values	1000
Limit values	Yes
Multiplexing	Yes
Structs	No
Type Date & Time	1000
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
Fields per image	50
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 per image	5
Methods	Trend
Limit value lines	Yes
Number of bars per chart	5
Limit value lines	Yes
alphanumeric fields	1000
alphanumeric fields per image	100
numerical fields	1000
numerical fields per image	100
Password errors	1000
Number of slides per image	0
Number of analog indicators per image	0
Number of visible switches per project	1000
visible switches per image	100
hidden switches per image	100
Number of status switches per project	1000
Button status switches per image	100
Number of selector switches per project	1000
Selector switches per image	100
Number of decade switches per project	0
Decade switches per image	0
Number of signal lamps per project	1000
Signal lamps per image	100
Attributes for dynamic objects	
Color change	Yes
X/Y movement	Yes
Hide	Yes
Angle of turn	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), color print, hardcopy
Transfer (upload/download)	
Transfer of configuration	MPI/PROFIBUS DP, serial, USB, Ethernet, by means of external storage medium, automatic transfer recognition
Process coupling	
Connection to controller	S5, S7-200, S7-300/400, Win AC, PC (TCP/IP), SINUMERIK, SIMOTION, Allen Bradley (DF1), Mitsubishi (FX), Telemecanique (ADJUST), Modicon (Modbus), further non-Siemens drivers, see chapter "System interfaces"
S7-1200	Yes
S7-1500	No
S7-200	Yes
PPI (point-to-point)	Yes
PPI network	No
MPI	Yes
PROFIBUS DP	Yes
Ethernet	Yes
S7-300/400	Yes
MPI	Yes
PROFIBUS DP	Yes
PROFINET	Yes
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
Telemecanique (Uni-Telway)	Yes ; Only in combination with WinCC flexible
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	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
I/O / Options	
I/O devices	Printer
Multi Media Card	Yes
Additional software components loadable	Yes
Dimensions	
Front of enclosure (W x H)	243 mm x 212 mm
Weight	
Weight	1 kg
other	
free hotline	Yes
Warranty period	1 a
Status	Mar 4, 2013