SIMATIC OP 73 MICRO

Overview

- Operator Panel for controlling and monitoring machines and systems
- Graphics in a new dimension: small and smart
- Pixel-graphics 3" LCD, monochrome
- 8 system keys, 4 user-configurable function keys
- Specific to the SIMATIC S7-200:
  Communication with the controller takes place via the integrated interface (point-to-point)
- Connection to the controller via MPI or PROFIBUS DP cable

Benefits

- High-contrast display for good readability
- Large keys for high operational safety
- Simple handling and configuring
- Fast configuring and start-up
  - Service-friendly thanks to maintenance-free design (no battery) and long service life of the backlighting
- Graphics library is available complete with ready-to-use display objects
- Can be used worldwide:
  - 32 languages can be configured (including Asiatic and Cyrillic character sets)
  - Up to 5 languages are selectable online

Application

OP 73micro Operator Panels can be used wherever machines and systems are controlled and monitored locally – in production, process and building automation alike. They are used in all types of sectors and applications.
The OP 73micro has been designed specifically for use with the SIMATIC S7-200.

Compatibility

- Same mounting cutout as for OP3 and TD 200

Design

- 3" LCD, 160 x 48 pixels, monochrome
- 8 system keys, 4 freely configurable function keys
- Numeric and alphanumeric input using cursor control keys
- Compact design with small installation depth
- Rugged plastic housing
- The front is resistant to various oils, greases and standard detergents
- Plug-in terminals for connecting a 24 V DC power supply
- RS 485 interface for connecting the MPI connecting cable or the PPI adapter

Function

- Input/output fields
  for displaying and changing process parameters
- Function keys
  for direct triggering of functions and actions. Up to 16 functions can be configured simultaneously on function keys
- Graphics
  can be used as icons instead of text to "label" function keys or buttons. They can also be used as simple on-screen graphics.
  In the configuration tool, a library is available containing an extensive range of graphics and a wide variety of objects. All editors with an OLE interface can be used as graphics editors (such as PaintShop, Designer or CorelDraw)
- Predefined
  for labeling function keys, process images and process values in different font sizes
- Bars
  for the graphical display of dynamic values.
- Language selection during runtime
  - 5 online languages, 32 configuration languages incl. Asian and Cyrillic character sets
- User administration (security) according to the requirements of the various sectors
  - Authentication using password
- Signaling system

- Discrete alarms
- Analog messages
- Freely definable message classes (e.g., status/fault messages) for definition of acknowledgment response and display of message events
- Message history
- Help texts
for process images, messages and variables
- Arithmetic functions
- Limit value monitoring
for reliable process control of inputs and outputs
- Indicator light
for machine and plant status indication
- Scheduler for global function execution
- Template concept
Creation of picture templates (picture elements configured in the template appear in every image)
- User-friendly maintenance and configuration thanks to:
  - Backup and restoration of configuration, operating system and firmware on a PC using ProSave
  - Configuration download serially via RS485
  - Individual contrast settings
  - No batteries are necessary

Configuring

SIMATIC WinCC flexible Micro, Compact, Standard or Advanced engineering software Version 2004 SP1 and higher plus HSP is used for configuration.

For more information about engineering software, see HMI software/engineering software SIMATIC WinCC flexible.

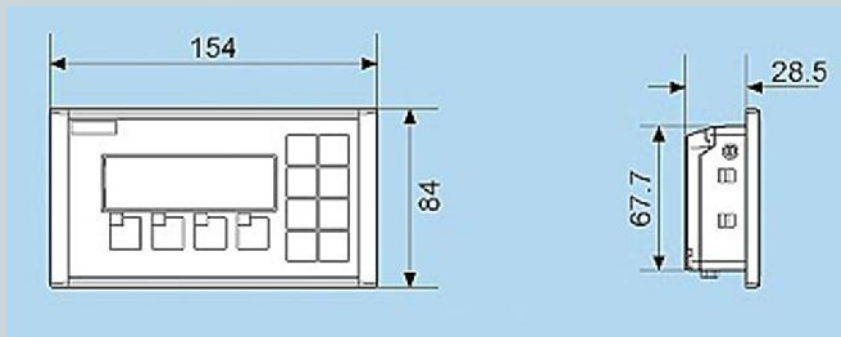A PC/PPI adapter cable is needed to download the configuration.

Integration

The OP 73micro can be connected to all SIMATIC S7-200 CPUs using the standard MPI bus cables or PROFIBUS DP cables (integration into networks possible).

Note:

For further information see "System interfaces"

Dimensional drawings

OP 73micro: Installation cutout (W x H) in mm: 138 x 68

Note
Do you need a specific modification or option for the products described here? Then refer to "Customized products", where you will find information about additional sector-specific products that can be ordered as well as about options for customer-specific modification and adaptation.

Technical specifications

More information

Additional information is available in the Internet under:

http://www.siemens.com/simatic-micropanels

Technical specifications

	6AV6 640-0BA11-0AX0 OP 73micro
Display	
Size	3"
Display type	STN, Schwarz/Weiss
Resolution (pixels)	
•Resolution (WxH in pixel)	160 x 48
Backlighting	

•MTBF backlighting (at 25 °C)	about 100,000 hours
Control elements	
Control elements	Membrane keyboard
Function keys, programmable	4 function keys
Connection for mouse/keyboard/barcode reader	- / - / -
Keyboard fonts	
•System keys	8
Touch operation	
•Touch screen	No
Supply voltage	
Supply voltage	24 V DC
Input current	
Rated current	0.1 A
Processor	
Processor	ARM
Memory	
Type	Flash
Usable memory for user data	128 KB usable memory for user data
Time of day	
Clock	
•Type	Software clock, no battery backup
Interfaces	

Interfaces	1 x RS485 (max. 187.5 Mbit/s)
Ambient conditions	
Storage/transport temperature	
•Transport, storage	-20 °C to +60 °C
Relative humidity	
•max. relative humidity	90 %
Mounting position	vertical
maximum permissible angle of inclination without external ventilation	+/- 80 °
Degree and class of protection	
Front	IP65, NEMA 4x (when installed)
Rear	IP20
Standards, approvals, certificates	
Certifications	CE, GL, ABS, BV, DNV, LRS, UL, CSA, cULus, C-TICK, NEMA 4x
FM Class I Div. 2	No
GL	Yes
ABS	Yes
BV	Yes
DNV	Yes
LRS	Yes
Class NK	Yes
PRS	No
Gost-R	No

Suitable for safety functions	No
Use in hazardous areas	
•EX zone 2	No
•EX zone 22	No
Operating systems	
Operating system	LINUX
Configuration	
Configuration software	
•Configuration tool	WinCC flexible Micro Version 2004 SP1, HSP or higher (to be ordered separately)
Languages	
Online languages	
•Number of online/runtime languages	5
Functionality under WinCC flexible	
Libraries	Yes
Task planner	Yes
Status/control	Not possible
With alarm logging system (incl. buffer and acknowledgment)	
•Number of messages	250
•Bit messages	Yes
•Analog messages	Yes
Number of process images	
•Process images	250

•Variables	500
•Limit values	Yes
•Multiplexing	Yes
Image elements	
•Text objects	1,000 text elements
•Graphics object	Bit maps, icons, icon (full-screen)
•dynamic objects	Bar graphs
Lists	
•Text lists	150
•Graphics list	0
Security	
•Number of user groups	1
•Number of users	1
•Passwords exportable	Yes
Data carrier support	
•Multi Media Card	No
Transfer (upload/download)	
•Transfer of configuration	serial
Process coupling	
•Connection to controller	for S7-200, see section on "System interfaces"
Expandability/openness	
•Open Platform Program	No
Dimensions	