SIEMENS

Data sheet 6AV6644-0BA01-2AX1



Figure similar

spare part As of 01.01.2015, the new part is blocked for delivery. Spare part can continue to be purchased, but price may deviate from new part. Further information under SIMATIC current entry ID: 109486162. For questions, the familiar contact persons are available. SIMATIC MP 377 12" Key Multi Panel, Windows CE 5.0 12" color TFT display 12 MB configuration memory configurable as of WinCC flexible 2007 new Key aluminum front with uniform clamps

General information	
Product type designation	MP377 12" key
Display	
Design of display	TFT
Screen diagonal	12.1 in
Color display	Yes
Number of colors	65 536
Resolution (pixels)	
● Horizontal image resolution	800 pixel
● Vertical image resolution	600 pixel
Backlighting	
● MTBF backlighting (at 25 °C)	50 000 h
Control elements	
Control elements	Membrane keyboard
Keyboard	
● Function keys	
— Number of function keys	36
— Number of function keys with LEDs	36
● System keys	Yes
— Number of system keys	38
● Numeric keyboard	Yes
● alphanumeric keyboard	Yes
● hexadecimal keyboard	Yes
● Multi-key operation	Yes
— Number of multi-key operations	2
Touch operation	
● Design as touch screen	No; without
Connection type	
● Type of connection for mouse/keyboard/barcode reader	USB / USB / USB
Installation type/mounting	
maximum permissible angle of inclination without external ventilation	35°
Supply voltage	
Type of supply voltage	DC
Input current	
Current consumption (rated value)	1.5 A
Starting current inrush I²t	4 A²·s
Power	

Subject to change without notice
© Copyright Siemes

Active power input, typ.	36 W
Storage	
Type of memory	Flash / RAM
Memory available for user data	12 288 kbyte
Time of day	
Clock	
● Type	Hardware clock, battery backup, synchronizable
● retentive	Yes
● synchronizable	Yes
Interfaces	
Interfaces/bus type	1x RS 422, 1x RS 485, 2x Ethernet (RJ45)
Number of industrial Ethernet interfaces	2
Number of RS 485 interfaces	1
Number of RS 422 interfaces	1
Number of USB interfaces	2; Up to 1 GB respectively
CF card slot	1x CF card slot
Multimedia card/SD card slot	1x Multimedia Card slot, up to 128 MB
With software interfaces	No
Protocols	
Supports protocol for PROFINET IO	Yes
PROFIsafe	No
PROFIBUS	Yes
EtherNet/IP	Yes
MPI	Yes
Protocols (Ethernet)	
● TCP/IP	Yes
Protocols (terminal link)	
● Sm@rtServer	Yes
Further protocols	
● MODBUS	Yes
EMC	
Emission of radio interference acc. to EN 55 011	
● Limit class A, for use in industrial areas	Yes
Degree and class of protection	
IP (at the front)	IP65
IP (rear)	IP20
NEMA (front)	NEMA 4, NEMA 12 (when installed)
Standards, approvals, certificates	
CE mark	Yes
UL approval	Yes
cULus	Yes
Use in hazardous areas	
● ATEX Zone 2	No; certificate no longer available as of 1 October 2020
● ATEX Zone 22	No; certificate no longer available as of 1 October 2020
Ambient conditions	
Ambient temperature during operation	
● min.	0 °C
● max.	50 °C
Ambient temperature during storage/transportation	
● min.	-20 °C
● max.	60 °C
Relative humidity	
● Operation, max.	90 %
Operating systems	
pre-installed operating system	Windows CE
Configuration	
Message indicator	Yes
Alarm system (incl. buffer and acknowledgment)	Yes

© Copyright Siemes

Process value display (output)	Yes
Process value default (input) possible	Yes
Recipe management	Yes
Configuration software	
● Configuration tool	WinCC flexible Standard Version 2007 or higher (to be ordered separately)
● STEP 7 Basic (TIA Portal)	No
● STEP 7 Professional (TIA Portal)	No
● WinCC flexible Compact	No
● 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
Languages	
Online languages	
● Number of online/runtime languages	16
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	70
Message system	
● Number of alarm classes	32
● Number of messages	4 000
● Bit messages	Yes
— Number of bit messages	4 000
● Analog messages	Yes
— Number of analog messages	200
● Telegram message procedure Alarm S	Yes
● System messages HMI	Yes
● System messages PLC	Yes
● System event, more (SIMATIC S7, SINUMERIK, SIMOTION, ...)	Yes
● Lines	1
● Number of characters per message	80
● Number of process values per message	8
● Message indicator	Yes
● First/last value	Yes
Recipe management	
● Number of recipes	500
● Data records per recipe	1 000
● Entries per data record	1 000
● Recipe memory	128 KB integrated Flash, expandable
Variables	
● Number of variables per device	4 096; Configuration with WinCC flexible 2008 and higher
● Number of variables per screen	400
● Number of variables	2 000
● Initial values	2 048
● Type Date & Time	2 048
● Limit values	Yes
● Multiplexing	Yes
● Structures	Yes
Images	
● Number of configurable images	500
● Permanent window/default	Yes
● Start screen configurable	Yes

© Copyright Siemes

● Image selection by PLC	Yes
● Image number in the PLC	Yes
Image objects	
● Text objects	30 000 text elements
● Number of I/O fields per image	400
● Number of date/time fields	400
● Return	Yes
● Graphics object	Bit maps, icons, vector graphics
— Icons	2 000
Complex image objects	
● Status/control	With SIMATIC S7
● dynamic objects	Diagrams, bar graphs, sliders, analog display, invisible buttons
— Number of objects per project	2 000
— Number of curve diagrams per image	20
● Methods	Trend / profile
● Bar graphs	
— Number of bars per chart	20
● Sliders	
— Number of slides per image	20
● Pointer instruments	
— Number of analog indicators per image	20
● Limit value lines	Yes
● Number of alphanumerical fields	300
— alphanumeric fields per image	400
● Number of numerical fields	2 048
— numerical fields per image	400
● Number of password fields	2 048
● Number of visible switches per project	400
— visible switches per image	400
— hidden switches per image	400
● Number of status switches per project	400
— Number of status switches per image	400
● Number of selector switches per project	400
— Selector switches per image	400
● Number of signal lamps per project	400
— Signal lamps per image	400
Attributes for dynamic objects	
● Color change	Yes
● X/Y movement	Yes
● Hide	Yes
Lists	
● Number of text lists per project	500
● Number of text lists per image	400
● Number of entries per text list	256
● Number of graphics lists per project	500
● Number of graphic lists per image	400
● Number of entries per graphics list	256
Archiving	
● Number of archives per device	50
● Number of measuring points per project	50
● Number of entries per archive	50 000
● Message archive	Yes
● Process value archive	Yes
● Archiving methods	Sequential log, circular log, alarm log, process value archive
— Sequential archive	Yes
— Short-term archive	Yes
● Memory location	CF card, SD/MMC card, Ethernet, USB memory stick
— CF card	Yes
— Ethernet	Yes

© Copyright Siemes

● Data storage format	CSV file, readable, e.g. with MS Excel, MS Access
— CSV	Yes
● external evaluation	readable, e.g. with MS Excel, MS Access, etc.
● Size of archive	depending on free memory on ext. card/stick or on free hard disk space via network drive
● Online evaluation	via trends
— using trend curves	Yes
Filters	
● cyclic	Yes
● Tolerance	Yes
● Change	Yes
Security	
● Number of user groups	50
● Number of user rights	32
● Password export/import	Yes
Data carrier support	
● CF card	Yes
● Hard disk	Yes
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, TI 505, Win AC, PC (TCP/IP), SINUMERIK, SIMOTION, Allen Bradley (DF1), Allen Bradley (DF485), Mitsubishi (FX), OMRON (LINK/Multilink), Modicon (Modbus), further non-Siemens drivers, see chapter "System interfaces"
● S7-1200	Yes
● S7-1500	Yes
● S7-200	Yes
— PPI (point-to-point)	Yes
— PPI network	Yes
— MPI	Yes
— PROFIBUS DP	Yes
● S7-300/400	Yes
— MPI	Yes
— PROFIBUS DP	Yes
— PROFINET	Yes
● S5	Yes
— PROFIBUS DP	Yes
● TI 505	Yes
● Allen Bradley (DF1)	Yes
● Allen Bradley (DF485)	Yes
● Mitsubishi (FX)	Yes
● Mitsubishi (MP4)	Yes
● Telemecanique (Uni-Telway)	Yes
● OMRON (Host Link)	Yes
● Modicon (Modbus RTU)	Yes
● GE-Fanuc (SNP)	Yes
Functions	
● Key repeat	Yes
● TAB sequence	Yes
● Calculating functions	Yes
● Animate	Yes
Service tools/configuration aids	
● Backup/Restore manually	Yes
● Simulation	Yes
● Device switchover	Yes
● Delta transfer	Yes

© Copyright Siemes

● Monitoring function for battery and memory	Yes
Expandability/openness	
● Open Platform Program	Yes
Peripherals/Options	
Peripherals	Printer, card reader, barcode reader
SIMATIC HMI MM memory card: Multi Media Card	Yes
SIMATIC HMI SD memory card: Secure Digital memory card	Yes
USB memory	Yes
Additional software components loadable	Yes
Dimensions	
Width of the housing front	483 mm
Height of housing front	310 mm
Mounting cutout, width	450 mm
Mounting cutout, height	290 mm
mounting depth	59 mm
Weights	
Weight (without packaging)	5.5 kg

Classifications

	Version	Classification
eClass	16	27-33-02-01
eClass	14	27-33-02-01
eClass	12	27-33-02-01
eClass	9.1	27-33-02-01
eClass	9	27-33-02-01
eClass	8	27-24-23-02
eClass	7.1	27-24-23-02
eClass	6	27-24-23-02
ETIM	10	EC001412
ETIM	9	EC001412
ETIM	8	EC001412
ETIM	7	EC001412
IDEA	4	6607
UNSPSC	15	43-21-15-06

Approvals / Certificates

General Product Approval

Manufacturer Declaration

General Product Approval

China RoHS

EMV

For use in hazardous locations

FM

Maritime application

last modified: 4/4/2025

© Copyright Siemens