

Siemens 6AV6642-0DC01-1AX1 Manual

Brand	Siemens
Product Series	Siemens
Product Type	STN, 4 blue levels

Description

6AV6642-0DC01-1AX1

-

SIMATIC OP177B 6" DP BLUE MODE STN DISPLAY
TOUCH AND KEYS MPI-/PROFIBUS-DP PROTOCOL
RS485-/RS422-/USB- 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, 4 blue levels

Number of grayscales 4

Color type Blue levels

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

www.AutoDCSTech.com

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 A²s

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 (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 D16 in con. with WinCC flex: 2008 SP1)

Special interfaces No

Industrial Ethernet

Industrial Ethernet interface No

Industrial Ethernet status LED 0

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

www.AutoDCSTech.com

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), 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

www.AutoDCSTech.com

Bradley (DF1), Mitsubishi (FX), Telemecanique (ADJUST), Modicon (Modbus), for further non-Siemens drivers, see section on "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 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

Telemecanique (Uni-Telway) Yes ; Only in combination with WinCC flexible

OMRON (LINK/Multilink) No

Modicon (Modbus) Yes

Functions

www.AutoDCSTech.com

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

www.AutoDCSTech.com