

SIPLUS HMI TP277 6" TOUCH FOR MEDIAL STRESS  
 BASED ON 6AV6643-0AA01-1AX0



| General information                          |                    |
|--|--------------------|
| Product function                             |                    |
| Customer-specific configuration              | Yes                |
| Display                                      |                    |
| Design of display                            | TFT                |
| Screen diagonal                              | 5.7 in             |
| Size   | 5.7"               |
| Display type                                 | TFT, 256 Farben    |
| 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 60,000 hours |
| Control elements                             |                    |
| Control elements                             | Touch screen       |
| Operating options                            | Touch              |
| Connection for mouse/keyboard/barcode reader | USB / USB / USB    |

| Keyboard fonts                     |   |
|------------------------------------|---|
| Keys with LED                      | No  |
| Numeric/alphabetical input         | Yes / Yes   |
| hexadecimal keyboard               | Yes   |
| Touch operation                    |   |
| Touch screen                       | Analog, resistive                                 |
| Design as touch screen             | Yes   |
| Touch screen (analog/resistive)    | Yes   |
| Supply voltage                     |   |
| Supply voltage                     | 24 V DC   |
| Processor                          |   |
| Processor                          | RISC 32-bit                                       |
| Processor type                     | RISC 32-bit                                       |
| Memory                             |   |
| Type                               | Flash / RAM                                       |
| Usable memory for user data        | 4 MB usable memory for user data                  |
| Main memory                        |   |
| Capacity of main memory, maximum   | 64 Mbyte  |
| Time of day                        |   |
| Clock                              |   |
| Type                               | Software clock, synchronizable, no battery backup |
| Interfaces                         |   |
| Interfaces                         | 1 x RS422, 1 x RS485, 1 x Ethernet (RJ45)         |
| Number of RS 485 interfaces        | 1   |
| USB port                           | 1 x USB   |
| Multi Media Card slot              | 1 x Multi Media Card slot                         |
| Industrial Ethernet                |   |
| Industrial Ethernet interface      | 1 x Ethernet (RJ45)                               |
| Degree and class of protection     |   |
| Front                              | IP65  |
| Type of protection                 | IP20  |
| IP (at the front)                  | IP65  |
| Rear                               | IP20  |
| Standards, approvals, certificates |   |
| Certifications                     | CE  |
| Suitable for safety functions      | No  |
| Ambient conditions                 |   |
| Mounting position                  | vertical  |

|   |   |
|---|---|
| <b>Operating temperature</b>  |   |
| <b>Operation</b>  | 0 °C to +50 °C  |
| <b>Storage/transport temperature</b>  |   |
| <b>Transport, storage</b>   | -20 °C to +60 °C  |
| <b>Relative humidity</b>  |   |
| <b>max. relative humidity</b>   | 100 % ; Relative humidity, incl. condensation / frost permitted (no commissioning under condensation conditions)  |
| <b>Extended ambient conditions</b>  |   |
| <b>Relative to ambient temperature-atmospheric pressure-installation altitude</b> | 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) |
| <b>Resistance</b>   |   |
| <b>to biologically active substances / conformity with EN 60721-3-3</b>           | 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!                                     |
| <b>to chemically active substances / conformity with EN 60721-3-3</b>             | Yes ; Class 3C4 incl. salt spray. The supplied connector covers must remain on the unused interfaces during operation!  |
| <b>to mechanically active substances / conformity with EN 60721-3-3</b>           | Yes ; Class 3S4 incl. sand, dust. The supplied connector covers must remain on the unused interfaces during operation!  |
| <b>Operating systems</b>  |   |
| <b>Operating system</b>   | Windows CE  |
| <b>Configuration</b>  |   |
| <b>Message indicator</b>  | Yes   |
| <b>With alarm logging system (incl. buffer and acknowledgment)</b>                | Yes   |
| <b>Process value display (output)</b>   | Yes   |
| <b>Process value default (input) possible</b>                                     | Yes   |
| <b>Recipe administration</b>  | Yes   |
| <b>Configuration software</b>   |   |
| <b>Configuration tool</b>   | WinCC flexible Standard Version 2005 SP1 or higher (to be ordered separately)   |
| <b>2nd configuration kit</b>  | WinCC flexible Standard   |
| <b>Version</b>  | Version 2005 SP 1   |
| <b>Configuration tool</b>   | WinCC flexible  |
| <b>Type</b>   | Standard  |
| <b>Languages</b>  |   |
| <b>Online languages</b>   |   |
| <b>Number of online/runtime languages</b>   | 16  |
| <b>Languages</b>  |   |
| <b>Languages per project</b>  | 32  |
| <b>Functionality under WinCC (TIA Portal)</b>                                     |   |
| <b>Libraries</b>  | Yes   |

|  |   |
|--|---|
| <b>Task planner</b>  | Yes   |
| <b>Help system</b>   | Yes   |
| <b>Number of characters per info text</b>                            | 80  |
| <b>With alarm logging system (incl. buffer and acknowledgment)</b>   |   |
| <b>Number of alarm classes</b>                                       | 32  |
| <b>Number of messages</b>  | 4000  |
| <b>Bit messages</b>  | Yes   |
| <b>Analog messages</b>   | Yes   |
| <b>Number of bit messages</b>  | 4000  |
| <b>Number of analog messages</b>                                     | 4000  |
| <b>System messages HMI</b>   | Yes   |
| <b>System messages PLC</b>   | Yes   |
| <b>System messages, other (SIMATIC S7, Sinumerik, Simotion, ...)</b> | Yes   |
| <b>Message length (in characters)</b>                                | 80  |
| <b>Lines</b>   | 1   |
| <b>Number of process values per message</b>                          | 8   |
| <b>Acknowledgment groups</b>   | Yes   |
| <b>Message indicator</b>   | Yes   |
| <b>First/last value</b>  | Yes   |
| <b>Recipes</b>   |   |
| <b>Number of recipes</b>   | 300   |
| <b>Data records per recipe</b>                                       | 500   |
| <b>Entries per data record</b>                                       | 1000  |
| <b>Recipe memory</b>   | 64 KB integrated Flash, expandable (using optional memory card) |
| <b>Variables</b>   |   |
| <b>Number of variables per device</b>                                | 2048  |
| <b>Number of variables per screen</b>                                | 200   |
| <b>Number of variables</b>   | 1000  |
| <b>Limit values</b>  | Yes   |
| <b>Multiplexing</b>  | Yes   |
| <b>Structs</b>   | Yes   |
| <b>Type Date &amp; Time</b>  | 2048  |
| <b>Images</b>  |   |
| <b>Number of configurable images</b>                                 | 500   |
| <b>Permanent window/default</b>                                      | Yes   |
| <b>Start screen configurable</b>                                     | Yes   |
| <b>Image selection by PLC</b>  | Yes   |
| <b>Image number in the PLC</b>                                       | Yes   |

| Image objects                           |  |
|---|--|
| Text objects                            | 10,000 text elements   |
| Fields per image                        | 200  |
| Date/time fields                        | 200  |
| Return                                  | Yes  |
| Graphics object                         | Bit maps, icons, vector graphics                                 |
| Icons                                   | 1000   |
| Complex image objects                   |  |
| Status/control                          | With SIMATIC S7  |
| dynamic objects                         | Diagrams, bar graphs, sliders, analog display, invisible buttons |
| Number of objects per project           | 1000   |
| Number per image                        | 10   |
| Methods                                 | Trend / profile  |
| Limit value lines                       | Yes  |
| Number of bars per chart                | 10   |
| Limit value lines                       | Yes  |
| alphanumeric fields                     | 300  |
| alphanumeric fields per image           | 200  |
| numerical fields                        | 2048   |
| numerical fields per image              | 200  |
| Password errors                         | 2048   |
| Number of slides per image              | 10   |
| Number of analog indicators per image   | 10   |
| Number of visible switches per project  | 200  |
| visible switches per image              | 200  |
| hidden switches per image               | 200  |
| Number of status switches per project   | 200  |
| Button status switches per image        | 200  |
| Number of selector switches per project | 200  |
| Selector switches per image             | 200  |
| Number of decade switches per project   | 200  |
| Decade switches per image               | 200  |
| Number of signal lamps per project      | 200  |
| Signal lamps per image                  | 200  |
| 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         | 200   |
| Number of entries per text list        | 256   |
| Number of graphics lists per project   | 400   |
| Number of graphic lists per image      | 200   |
| Number of entries per graphics list    | 256   |
| <b>Archiving</b>                       |   |
| Number of archives per device          | 20  |
| Number of measuring points per project | 20  |
| Number of entries per archive          | 10000   |
| Message archive                        | Yes   |
| Process value archive                  | Yes   |
| Archiving methods                      |   |
| Sequential archive                     | Yes   |
| Short-term archive                     | Yes   |
| Memory location                        | Multi Media Card  |
| Ethernet                               | Yes   |
| Data storage format                    |   |
| CSV                                    | Yes   |
| Online evaluation                      |   |
| Using trend curves                     | Yes   |
| <b>Filters</b>                         |   |
| cyclic                                 | Yes   |
| Tolerance                              | Yes   |
| Change                                 | Yes   |
| <b>Security</b>                        |   |
| Number of user groups                  | 50  |
| Number of user rights                  | 32  |
| Password export/import                 | Yes   |
| <b>Logging through printer</b>         |   |
| Recording/Printing                     | Alarms, report (shift report), color print, hardcopy  |
| <b>Transfer (upload/download)</b>      |   |
| Transfer of configuration              | MPI/PROFIBUS DP, USB, Ethernet, automatic transfer recognition  |
| <b>Process coupling</b>                |   |
| Connection to controller               | S5, S7-200, S7- 300/400, TI 505, SINUMERIK, SIMOTION, Allen Bradley (DF1), Allen Bradley (DF485), Mitsubishi (FX), Telemecanique (ADJUST), OMRON (LINK/Multilink), Modicon (Modbus), see section on "System interfaces" |
| S7-200                                 | Yes   |
| PPI (point-to-point)                   | Yes   |

|  |                         |
|--|-------------------------|
| <b>PPI network</b>                             | Yes                     |
| <b>MPI</b>                                     | Yes                     |
| <b>PROFIBUS DP</b>                             | Yes                     |
| <b>Ethernet</b>                                | Yes                     |
| <b>S7-300/400</b>                              | Yes                     |
| <b>MPI</b>                                     | Yes                     |
| <b>PROFIBUS DP</b>                             | Yes                     |
| <b>PROFINET</b>                                | Yes                     |
| <b>S5</b>                                      | Yes                     |
| <b>serial</b>                                  | Yes                     |
| <b>PROFIBUS DP</b>                             | Yes                     |
| <b>TI 505</b>                                  | Yes                     |
| <b>Allen Bradley (DF1)</b>                     | Yes                     |
| <b>Allen Bradley (DF485)</b>                   | Yes                     |
| <b>Mitsubishi (FX)</b>                         | Yes                     |
| <b>Mitsubishi (MP4)</b>                        | Yes                     |
| <b>Telemecanique (ADJUST)</b>                  | Yes                     |
| <b>Telemecanique (Uni-Telway)</b>              | Yes                     |
| <b>OMRON (LINK/Multilink)</b>                  | Yes                     |
| <b>Modicon (Modbus)</b>                        | Yes                     |
| <b>GE-Fanuc (SNP)</b>                          | Yes                     |
| <b>Functions</b>                               |                         |
| <b>TAB sequence</b>                            | Yes                     |
| <b>Calculating functions</b>                   | Yes                     |
| <b>Animate</b>                                 | Yes                     |
| <b>Service tools/configuration aids</b>        |                         |
| <b>Clean screen</b>                            | Yes                     |
| <b>Touch calibration</b>                       | Yes                     |
| <b>Backup/restore</b>                          | Yes                     |
| <b>Simulation</b>                              | Yes                     |
| <b>Device switchover</b>                       | Yes                     |
| <b>Delta transfer</b>                          | Yes                     |
| <b>Expandability/openness</b>                  |                         |
| <b>Open Platform Program</b>                   | Yes                     |
| <b>I/O / Options</b>                           |                         |
| <b>I/O devices</b>                             | Printer, barcode reader |
| <b>Multi Media Card</b>                        | Yes                     |
| <b>Additional software components loadable</b> | Yes                     |
| <b>Dimensions</b>                              |                         |

|                                   |                 |
|-----------------------------------|-----------------|
| <b>Front of enclosure (W x H)</b> | 212 mm x 156 mm |
| <b>Weight</b>                     |                 |
| <b>Weight (without packaging)</b> | 0.78 kg         |
| <b>other</b>                      |                 |
| <b>free hotline</b>               | Yes             |
| <b>Warranty period</b>            | 1 a             |
| Status                            | Jul 18, 2013    |