

MANUFACTURER DOCUMENT PACKAGE

# Manufacturer's Manual

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SIEMENS SCALANCE

## 6GK1561-3AA02

CP 5613 A3 PROFIBUS PCI CARD

Applicable product family: SIMATIC NET PC communication

OFFICIAL SOURCE

6GK1561-3AA02.pdf

The following pages are selected from the supplied manufacturer document and retain their original page content.

### product type designation



### CP 5613 A3

Communications processor CP 5613 A3, PCI card (32-bit; 3.3/5 V; 33/66 MHz); with a Interface for connection to PROFIBUS; including configuration tool and DP-Base software: DP-RAM interface for DP master; including PG and FDL protocol; Single License for 1 installation of runtime software, Class A; Software+Manuals on DVD; 2 languages (de, en); Operating system support see SIMATIC NET software

| transfer rate                                                                    |                             |
|----------------------------------------------------------------------------------|-----------------------------|
| transfer rate                                                                    |                             |
| • at the 1st interface / according to PROFIBUS                                   | 9.6 kbit/s ... 12 Mbit/s    |
| interfaces                                                                       |                             |
| number of electrical connections                                                 |                             |
| • at the 1st interface / according to PROFIBUS                                   | 1                           |
| type of electrical connection                                                    |                             |
| • at the 1st interface / according to PROFIBUS                                   | 9-pin Sub-D socket (RS 485) |
| supply voltage, current consumption, power loss                                  |                             |
| type of voltage / of the supply voltage                                          | DC                          |
| supply voltage                                                                   |                             |
| • 1 / from backplane bus                                                         | 3.3 V                       |
| • 2 / from backplane bus                                                         | 12 V                        |
| relative symmetrical tolerance / at DC                                           |                             |
| • at 3.3 V                                                                       | 9 %                         |
| • at 12 V                                                                        | 8 %                         |
| consumed current                                                                 |                             |
| • 1 / from backplane bus / at DC / maximum                                       | 0.15 A                      |
| • 2 / from backplane bus / at DC / maximum                                       | 0.25 A                      |
| power loss [W]                                                                   | 3.5 W                       |
| ambient conditions                                                               |                             |
| ambient temperature                                                              |                             |
| • during operation                                                               | 5 ... 55 °C                 |
| • during storage                                                                 | -20 ... +60 °C              |
| • during transport                                                               | -20 ... +60 °C              |
| relative humidity / at 25 °C / without condensation / during operation / maximum | 85 %                        |
| protection class IP                                                              | IP00                        |
| design, dimensions and weights                                                   |                             |
| module format                                                                    | PCI                         |
| width                                                                            | 18 mm                       |
| height                                                                           | 107 mm                      |
| depth                                                                            | 125 mm                      |
| net weight                                                                       | 0.098 kg                    |
| product features, product functions, product components / general                |                             |
| number of plug-in cards of same design / plug-in / per PC station                | 4                           |
| number of units / note                                                           | -                           |
| performance data / open communication                                            |                             |

|                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|----------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| software / for open communication / by means of SEND/RECEIVE / required                      | FDL driver included in scope of delivery of the CP                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| number of possible connections / for open communication / by means of SEND/RECEIVE / maximum | 80                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>performance data / PROFIBUS DP</b>                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| software / for DP master function / required                                                 | No                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| service / as DP master                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| • DPV0                                                                                       | Yes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| • DPV1                                                                                       | Yes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| • DPV2                                                                                       | Yes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| number of DP slaves / on DP master / operable                                                | 124                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| data volume                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| • of the address range of the inputs / as DP master / total                                  | 30256 byte                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| • of the address range of the outputs / as DP master / total                                 | 30256 byte                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| • of the address range of the inputs / per DP slave                                          | 244 byte                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| • of the address range of the outputs / per DP slave                                         | 244 byte                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| • of the address range of the diagnostic data / per DP slave                                 | 244 byte                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| software / for DP slave function / required                                                  | No                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| service / as DP slave                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| • DPV0                                                                                       | Yes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| • DPV1                                                                                       | Yes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| data volume                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| • of the address range of the inputs / as DP slave / total                                   | 244 byte                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| • of the address range of the outputs / as DP slave / total                                  | 244 byte                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>performance data / S7 communication</b>                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| software / for S7 communication / required                                                   | Yes, HARDNET-PB S7 (S7-5613)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| number of possible connections / for S7/PG communication / maximum                           | 50                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>performance data / multi-protocol mode</b>                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| number of active connections / with multi-protocol mode                                      | 50                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| number of configurable connections / per PC station                                          | 207                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>product functions / management, configuration, engineering</b>                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| configuration software / required                                                            | Included in scope of supply                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>product functions / diagnostics</b>                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| product function                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| • port diagnostics                                                                           | Yes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>standards, specifications, approvals</b>                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| standard                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| • for EMC                                                                                    | 89/336/EEC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| • for safety / from CSA and UL                                                               | CAN/CSA C22.2 & UL 60950-1, UL 1950                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| • for emitted interference                                                                   | EN 61000-6-3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| • for interference immunity                                                                  | EN 61000-6-2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| certificate of suitability                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| • CE marking                                                                                 | Yes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| • C-Tick                                                                                     | Yes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>further information / internet links</b>                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| internet link                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| • to web page: selection aid TIA Selection Tool                                              | <a href="http://www.siemens.com/tia-selection-tool">http://www.siemens.com/tia-selection-tool</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| • to website: Industrial communication                                                       | <a href="http://www.siemens.com/simatic-net">http://www.siemens.com/simatic-net</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| • to website: Industry Mall                                                                  | <a href="http://www.siemens.com/industrial-controls/mall">http://www.siemens.com/industrial-controls/mall</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| • to website: Information and Download Center                                                | <a href="http://www.siemens.com/industry/infocenter">http://www.siemens.com/industry/infocenter</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| • to website: Image database                                                                 | <a href="http://automation.siemens.com/bilddb">http://automation.siemens.com/bilddb</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| • to website: CAX-Download-Manager                                                           | <a href="http://www.siemens.com/cax">http://www.siemens.com/cax</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| • to website: Industry Online Support                                                        | <a href="https://support.industry.siemens.com">https://support.industry.siemens.com</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>security information</b>                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| security information                                                                         | Siemens provides products and solutions with industrial cybersecurity functions that support the secure operation of plants, systems, machines and networks. In order to protect plants, systems, machines and networks against cyber threats, it is necessary to implement – and continuously maintain – a holistic, state-of-the-art industrial cybersecurity concept. Siemens' products and solutions constitute one element of such a concept. Customers are responsible for preventing unauthorized access to their plants, systems, machines and networks. Such systems, machines and components should only be connected to an enterprise network or the internet if and to the extent such a connection is |

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Approvals / Certificates

| General Product Approval | EMV |
|--------------------------|-----|
|--------------------------|-----|

[Declaration of Con-  
formity](#)

[Manufacturer Declara-  
tion](#)



[KC](#)

Environment

[Confirmation](#)

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