



SETRON PAC3120, calibrated according to MID, LCD 96 x 96 mm Power Monitoring Device, control panel instrument with measurement of electrical variables, protocol: Modbus RTU, with graphical display,  $U_e$  230/400 V, 50 Hz,  $I_e$  x/1 A or x/5 A AC, additional optional auxiliary power supply 100 ... 250 V  $\pm$ 10% AC/DC screw terminal

| Model   |   |
|---|---|
| product brand name  | SETRON  |
| product designation   | multimeter  |
| design of the product   | basic   |
| product type designation  | 7KM PAC3120                                       |
| Measurements  |   |
| measuring procedure   |   |
| <ul style="list-style-type: none"> <li>for voltage measurement</li> <li>for current measurement</li> </ul>  | TRMS<br>TRMS                                      |
| type of measured value detection  | complete  |
| voltage curve   | Sinusoidal or distorted                           |
| measurable line frequency   |   |
| <ul style="list-style-type: none"> <li>initial value</li> <li>full-scale value</li> </ul>   | 45 Hz<br>65 Hz                                    |
| operating mode for measured value detection automatic line frequency detection  | Yes   |
| operating mode for measured value detection   |   |
| <ul style="list-style-type: none"> <li>set at 50 Hz</li> <li>set to 60 Hz</li> </ul>  | No<br>No  |
| Supply voltage  |   |
| design of the power supply  | Wide-range power supply                           |
| type of voltage of the supply voltage   | AC/DC   |
| supply voltage at AC  | 100 ... 250 V                                     |
| supply voltage at DC  | 100 ... 250 V                                     |
| Degree of protection protection class   |   |
| protection class IP on the front  | IP65  |
| Suitability   |   |
| suitability for operation   | Installation in stationary panels in closed rooms |
| Product Functions   |   |
| product function  |   |
| <ul style="list-style-type: none"> <li>voltage measurement</li> <li>current measurement</li> <li>active power measurement</li> <li>reactive power measurement</li> <li>frequency measurement</li> </ul> | Yes<br>Yes<br>Yes<br>Yes<br>Yes                   |
| Display and operation   |   |
| design of the display   | LCD   |
| height of the display   | 54 mm   |
| width of the display  | 72 mm   |

|   |  |
|---|--|
| color of the background of the display  | white  |
| illuminance of display backlight adjustable   | No   |
| time-controlled reduction of the illuminance of display backlight possible  | Yes  |
| display contrast adjustable   | Yes  |
| national language on the display screen is supported  | de, en, fr, spa, ita, por, tur, chi, pol   |
| number of keys  | 4  |
| <b>Communication</b>  |  |
| transfer rate minimum   | 5 kbit/s   |
| transfer rate maximum   | 115 kbit/s   |
| <b>Fault limits</b>   |  |
| reference condition for metering accuracy   | according to IEC61557-12, IEC62053-22 and IEC62053-24, EN 50470-3  |
| formula for relative total measurement inaccuracy   |  |
| <ul style="list-style-type: none"> <li>for measured variable voltage</li> <li>for measured variable current</li> <li>for measured variable active power</li> <li>for measured variable reactive power</li> <li>for measured variable output factor</li> <li>for measured variable active energy</li> <li>for measured variable reactive energy</li> </ul> | <ul style="list-style-type: none"> <li>+/- 0.2 %</li> <li>+/- 0.2 %</li> <li>+/- 0.5 %</li> <li>+/- 1 %</li> <li>+/- 0,5 %</li> <li>Class 0.5 according to IEC 61557-12 or Class 0.5S according to IEC 62053-22, Class C according to EN 50470-3</li> <li>Class 2 according to IEC 61557-12 or IEC 62053-24</li> </ul> |
| <b>Inputs Outputs</b>   |  |
| number of digital inputs  | 2  |
| type of electrical connection at the digital inputs   | screw-type terminals   |
| operating conditions for digital inputs external voltage supply   | Yes  |
| input voltage at digital input at DC maximum  | 30 V   |
| input current at digital input  |  |
| <ul style="list-style-type: none"> <li>initial value for signal&lt;1&gt;-recognition</li> </ul>   | 7 mA   |
| number of digital outputs   | 2  |
| type of switching output  | bidirectional  |
| digital output version  | switching or pulse output function   |
| operating voltage as output voltage at DC maximum permissible   | 30 V   |
| type of electrical connection at the digital outputs  | screw-type terminals   |
| output current  |  |
| <ul style="list-style-type: none"> <li>at the digital outputs at DC limited to 100 ms maximum</li> </ul>  | 130 mA   |
| internal resistance at the digital outputs  | 55 Ω   |
| standard for pulse emitter  | according to IEC62053-31   |
| pulse duration  |  |
| <ul style="list-style-type: none"> <li>initial value</li> <li>full-scale value</li> </ul>   | <ul style="list-style-type: none"> <li>30 ms</li> <li>500 ms</li> </ul>  |
| adjustable time period minimum  | 10 ms  |
| switching frequency at digital output maximum   | 17 Hz  |
| property of the output short-circuit proof  | Yes  |
| <b>Measuring inputs</b>   |  |
| measurable supply voltage between (PE)N and L at AC maximum rated value   | 230 V  |
| measurable supply voltage between (PE)N and L at AC   |  |
| <ul style="list-style-type: none"> <li>minimum</li> <li>maximum</li> </ul>  | <ul style="list-style-type: none"> <li>46 V</li> <li>276 V</li> </ul>  |
| measurable supply voltage between the line conductors at AC maximum rated value   | 400 V  |
| voltage measuring range extension with external voltage transformers  | yes  |
| line conductors and neutral conductors internal resistance for voltage measurement  | 1.5 MΩ   |
| measuring category for voltage measurement  | OVCIII   |
| measurable current  |  |
| <ul style="list-style-type: none"> <li>1 at AC rated value</li> <li>2 at AC rated value</li> </ul>  | <ul style="list-style-type: none"> <li>1 A</li> <li>5 A</li> </ul>   |

|   |            |
|---|------------|
| <b>relative measurable current at AC at energy and power measurement</b>    |            |
| • minimum   | 1 %        |
| • maximum   | 120 %      |
| <b>relative measurable current at AC</b>                                    |            |
| • minimum   | 10 %       |
| • maximum   | 100 %      |
| <b>current measuring range extension with external current transformers</b> | Yes        |
| <b>zero point suppression for current measurement</b>                       | 0 ... 10 % |
| <b>apparent power consumption for current measurement</b>                   |            |
| • with measuring range 5 A per phase  | 0.3 VA     |
| <b>measuring category for current measurement</b>                           | OVCIII     |

#### Connections

|   |                      |
|---|----------------------|
| <b>type of electrical connection</b>    |                      |
| • at the measurement inputs for voltage | screw-type terminals |
| • at the measurement inputs for current | screw-type terminals |

#### Mechanical Design

|   |          |
|---|----------|
| <b>fastening method DIN-rail mounting</b> | No       |
| <b>size of Power Monitoring Device</b>    | size 96  |
| <b>height</b>                             | 96 mm    |
| <b>width</b>                              | 96 mm    |
| <b>depth</b>                              | 56 mm    |
| <b>installation depth</b>                 | 51 mm    |
| <b>net weight</b>                         | 328 g    |
| <b>mounting position</b>                  | vertical |

#### Environmental conditions

|   |         |
|---|---------|
| <b>ambient temperature during operation</b>                                     |         |
| • minimum   | -25 °C  |
| • maximum   | 55 °C   |
| <b>ambient temperature during storage</b>                                       |         |
| • minimum   | -25 °C  |
| • maximum   | 70 °C   |
| <b>relative humidity at 25 °C without condensation during operation maximum</b> | 75 %    |
| <b>installation altitude at height above sea level maximum</b>                  | 2 000 m |
| <b>degree of pollution</b>  | 2       |

#### Certificates

|  |     |
|--|-----|
| certificate of suitability as EC Declaration of Conformity | yes |
|--|-----|

#### Approvals Certificates

|                          |       |             |
|--------------------------|-------|-------------|
| General Product Approval | other | Environment |
|--------------------------|-------|-------------|



[Confirmation](#)



[Confirmation](#)



#### Environment

[Environmental Con-  
firmations](#)



[Environmental Con-  
firmations](#)

#### Further information

Information on the packaging  
<https://support.industry.siemens.com/cs/ww/en/view/109813875>  
 Information for data generation and storage  
<https://support.industry.siemens.com/cs/ww/en/view/109995012>  
 Information- and Downloadcenter (catalogues, leaflets,...)  
<https://www.siemens.com/energy-automation>

Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=7KM3120-2BA01-1HA0>

Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<https://support.industry.siemens.com/cs/ww/en/ps/7KM3120-2BA01-1HA0>

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)

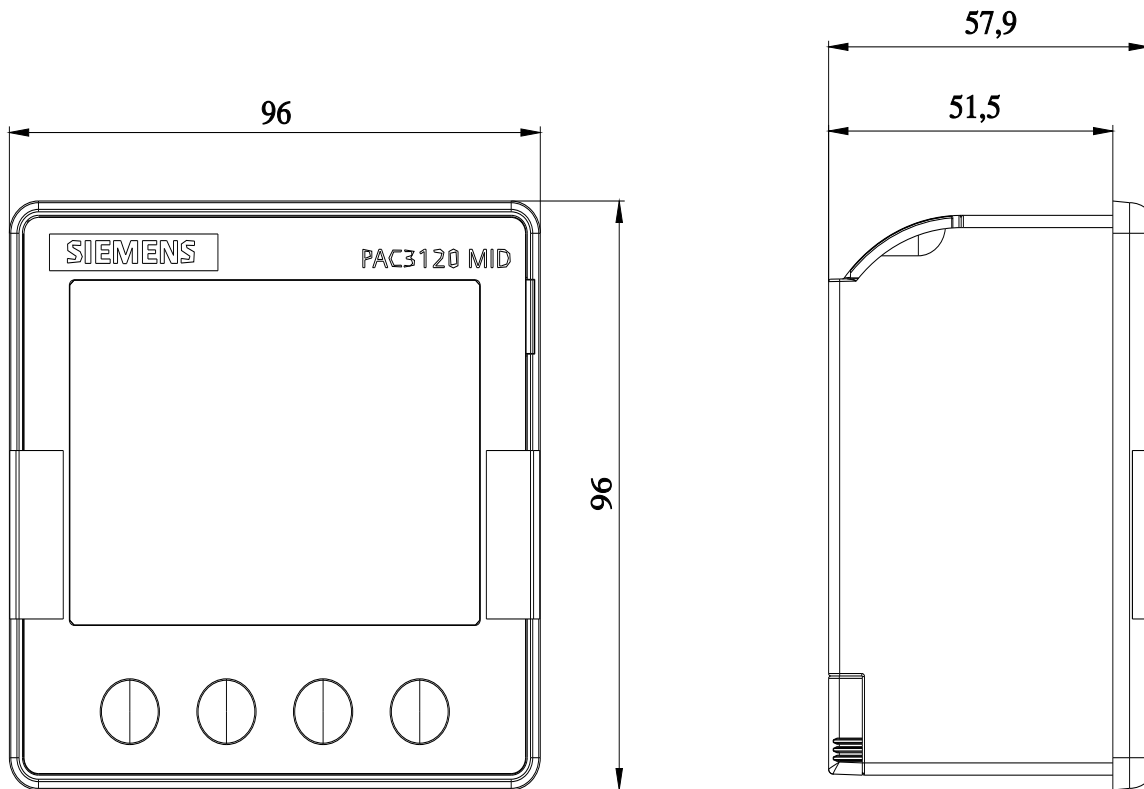
[https://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=7KM3120-2BA01-1HA0](https://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=7KM3120-2BA01-1HA0)

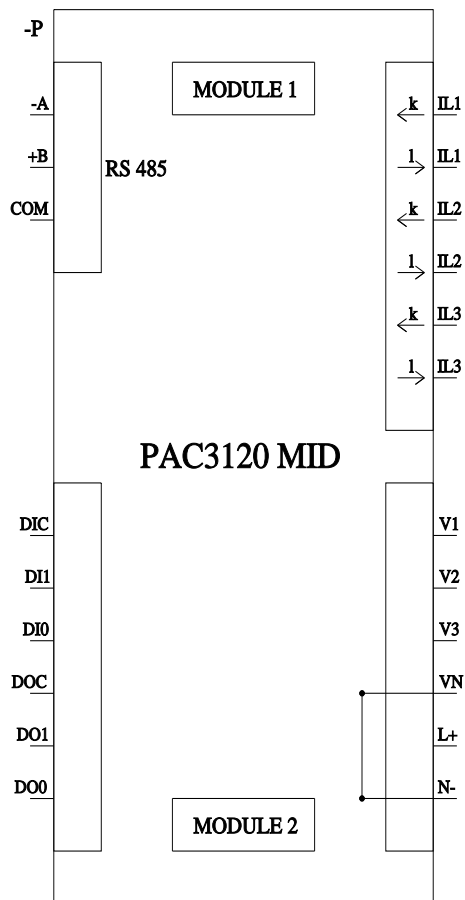
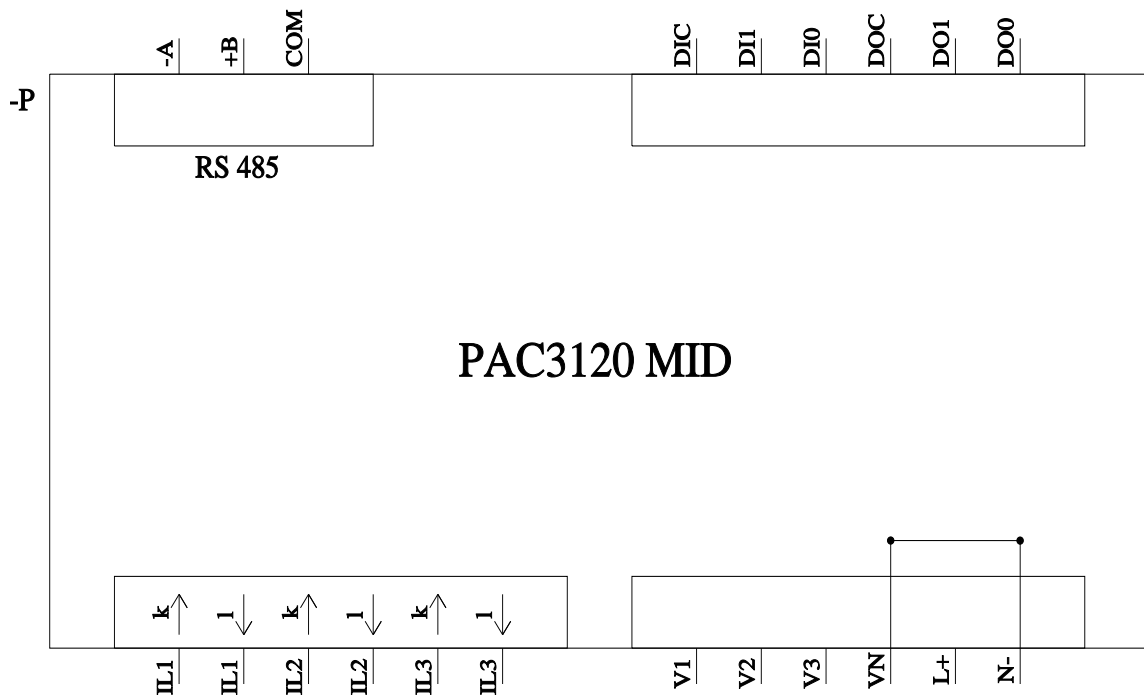
CAX-Online-Generator

<https://www.siemens.com/cax>

Tender specifications

<https://www.siemens.com/specifications>





last modified:

9/12/2025

