



SIPLUS HCS300I TEMPERATURE DETECTION MODULE  
TM4

product brand name

SIPLUS

### Inputs/ Outputs:

#### Number of analog inputs

- at 2-conductor technics
- at 4-conductor technics

4  
2

### General technical data:

#### physical measuring principle

Sigma delta modulation

#### Number of status displays

3

#### Type of display / as status display by LED

continuous light: ready, flashing light: no connection to basic device

#### Metering precision

typical  $\pm 1$  K, PT100 up to max.  $\pm 1.3$  K

#### Diagnose function / wire breakage

Yes

#### Temperature drift per °C / typical

%/°C 0.05

#### Impulse voltage resistance / of the outputs / maximum

V 15

#### A/D conversion time / at the analog input

ms 120

#### Sensor current / typical

μA 210

#### Galvanic isolation

- between the outputs and system interface
- between the distribution
- note

Yes  
Yes  
maximum voltage difference  $\pm 1$  V

|                                                                                                |     |   |
|------------------------------------------------------------------------------------------------|-----|---|
| Offset temperature per K / maximum                                                             | K/K | 1 |
| Temperature measurement deviation per K / maximum                                              | K/K | 1 |
| Reference code / according to DIN 40719 extended according to IEC 204-2 / according to IEC 750 |     | F |
| Reference code / according to DIN EN 61346-2                                                   |     | F |

#### Anschließbare Messfühler:

|                                                                             |    |           |
|-----------------------------------------------------------------------------|----|-----------|
| <b>Metering range temperature</b><br>• at thermocouple type K               | °C | 0 ... 400 |
| <b>Metering range temperature</b><br>• at thermocouple type J               | °C | 0 ... 400 |
| <b>Metering range temperature</b><br>• at thermocouple type L               | °C | 0 ... 400 |
| <b>Temperature measurement range</b><br>• at Pt 100 according to IEC 60751  | °C | 0 ... 400 |
| <b>Temperature measurement range</b><br>• at Pt 1000 according to IEC 60751 | °C | 0 ... 400 |

#### Communication:

|                                |  |                  |
|--------------------------------|--|------------------|
| <b>Design of the interface</b> |  | system interface |
|--------------------------------|--|------------------|

#### Supply voltage:

|                                   |  |                      |
|-----------------------------------|--|----------------------|
| <b>Design of the power supply</b> |  | Supply via base unit |
|-----------------------------------|--|----------------------|

#### Ambient conditions:

|                                                                                        |          |                                                                                                                                                                 |
|----------------------------------------------------------------------------------------|----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Protection class IP</b>                                                             |          | IP20                                                                                                                                                            |
| <b>Shock resistance / according to IEC 60068-2-27</b>                                  |          | 15g / 11 ms                                                                                                                                                     |
| <b>Conductor-bound parasitic coupling BURST / according to IEC 61000-4-4</b>           |          | 2 kV power supply lines / 1 kV signal lines                                                                                                                     |
| <b>Conductor-bound parasitic coupling SURGE / according to IEC 61000-4-5</b>           |          | on power supply lines: 1 kV symmetric, 2 kV asymmetric;<br>on signal lines > 30 m unshielded: 1 kV symmetric, 2 kV asymmetric, > 30 m shielded: 2 kV asymmetric |
| <b>Conducted interference as high-frequency radiation / according to IEC 61000-4-6</b> |          | 10 V (0.15 ... 80 MHz)                                                                                                                                          |
| <b>Electrostatic discharge / according to IEC 61000-4-2</b>                            |          | 6 kV contact discharge / 8 kV air discharge                                                                                                                     |
| <b>Field-bound parasitic coupling / according to IEC 61000-4-3</b>                     |          | 10 V/m (80 ... 1000 MHz), 3 V/m (1.4 ... 2.0 GHz), 1 V/m (2.0 ... 2.7 GHz)                                                                                      |
| <b>EMC emitted interference</b>                                                        |          | IEC61131: Class A; conducted and radiated: DIN EN 55011/CISPR11 (corresponds to degree of severity A)                                                           |
| <b>Installation altitude / at a height over sea level / maximum</b>                    | m        | 2,000                                                                                                                                                           |
| <b>Ambient temperature</b><br>• during storage<br>• during operating                   | °C<br>°C | -40 ... +80<br>-25 ... +60                                                                                                                                      |

|                          |     |               |
|--------------------------|-----|---------------|
| • during transport       | °C  | -40 ... +80   |
| <b>Air pressure</b>      |     |               |
| • during operating phase | hPa | 795 ... 1,080 |
| • during storage         | hPa | 660 ... 1,080 |

#### Connections:

|                           |                          |
|---------------------------|--------------------------|
| <b>Type of connection</b> | 2- and 4-wire technology |
|---------------------------|--------------------------|

#### terminals

|                                                                                        |                      |
|----------------------------------------------------------------------------------------|----------------------|
| <b>Design of the electrical connection / for auxiliary and control current circuit</b> | screw-type terminals |
|----------------------------------------------------------------------------------------|----------------------|

#### Installation/mounting/dimensions:

|                          |    |                                                                                                                  |
|--------------------------|----|------------------------------------------------------------------------------------------------------------------|
| <b>mounting position</b> |    | any                                                                                                              |
| <b>Mounting type</b>     |    | Snap-mounting on a TH 35 mm standard rail compliant with IEC 60715 or screw-mounted using additional push-in lug |
| <b>Width</b>             | mm | 22.5                                                                                                             |
| <b>Height</b>            | mm | 102                                                                                                              |
| <b>Depth</b>             | mm | 115                                                                                                              |

#### Certificates/approvals:

|                                    |                   |
|------------------------------------|-------------------|
| <b>Verification of suitability</b> | CE, cULus, c-tick |
|------------------------------------|-------------------|

General Product  
Approval

Declaration of Conformity



#### Further information:

**Information- and Downloadcenter (Catalogs, Brochures,...)**

<http://www.automation.siemens.com/mcms/topics/en/siplus/industrial-heating-control/Pages/home.aspx>

**Industry Mall (Online ordering system)**

<http://www.siemens.com/industrial-controls/mall>

**CAX-Online-Generator**

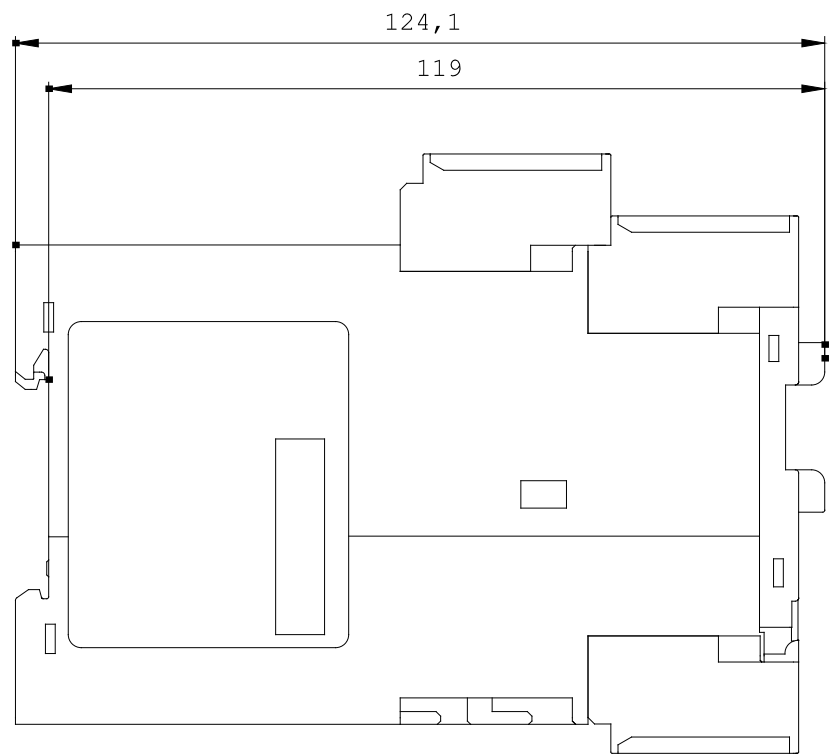
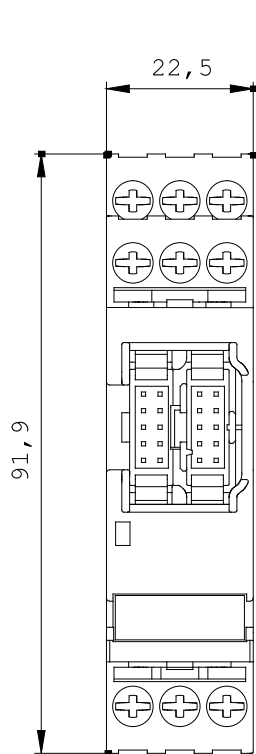
<http://www.siemens.com/cax>

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

<http://support.automation.siemens.com/WW/view/en/6BK1700-4BA60-0AA0/all>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=6BK1700-4BA60-0AA0](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=6BK1700-4BA60-0AA0)



last change:

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