

SIPLUS HCS4000 I/O module DI/DO with 8 digital outputs and 8 configurable inputs or outputs



General information	
Product type designation	I/O4000 DI/DQ
Installation type/mounting	
Mounting type	Screw mounting to CIM
Mounting position	vertical
Type of ventilation	Forced ventilation
Supply voltage	
Design of the power supply	Power supply via CIM
Power	
Active power input, max.	1 W
Digital inputs	
Number of digital inputs	8
Connection method	
<ul style="list-style-type: none"> • Design of electrical connection at the digital inputs — Connectable conductor cross-sections, solid 	1x 18 pole connector with spring-loaded connection 1x (0.2 ... 1.5 mm ²)

— Connectable conductor cross-sections, finely stranded with wire end processing	1x (0.25 ... 1.5 mm ²)
— Connectable conductor cross-sections for AWG cables	1x (24 ... 16)

Digital outputs

Number of semiconductor outputs	16
Design of switching output	semiconductor output (high side switch)
Switching performance	monostable
short-circuit proof	Yes

Control supply voltage

- | | |
|---------------------------------------|--------|
| • permissible range, lower limit (DC) | 19.2 V |
| • permissible range, upper limit (DC) | 28.8 V |

Output voltage

- | | |
|--------------------------|--------|
| • Type of output voltage | DC |
| • Rated value (DC) | 24 V |
| • Output voltage, min. | 19.2 V |
| • Output voltage, max. | 28.8 V |

Output current

- | | |
|--|--------|
| • for signal "1" permissible range, max. | 500 mA |
|--|--------|

Connection method

- | | |
|--|--|
| • Design of electrical connection at the digital outputs | 2x 18 pole connector with spring-loaded connection |
| — Connectable conductor cross-sections, solid | 1x (0.2 ... 1.5 mm ²) |
| — Connectable conductor cross-sections, finely stranded with wire end processing | 1x (0.25 ... 1.5 mm ²) |
| — Connectable conductor cross-sections for AWG cables | 1x (24 ... 16) |
| • Design of electrical connection for control supply voltage | 2x 18 pole connector with spring-loaded connection |
| — Connectable conductor cross-sections with wire end processing | 1x (0.25 ... 1.5 mm ²) |
| — Connectable conductor cross-sections for AWG cables | 1x (24 ... 16) |

Interfaces

Interfaces/bus type	system interface
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Interrupts/diagnostics/status information

Number of status displays	18
LED status display	LED green = Ready, LED red = Error display, 1 LED yellow per output: LED on - H status; LED off -L status

Potential separation

between outputs and system interface	Yes
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Isolation	
Overvoltage category	III
Degree of pollution	2

EMC	
EMC interference emission	Limit value in accordance with IEC 61000-6-4:2007 + A1:2011
Electrostatic discharge acc. to IEC 61000-4-2	4 kV contact discharge / 8 kV air discharge
Field-related interference acc. to IEC 61000-4-3	10 V/m (80 ... 1 000 MHz), 3 V/m (1.4 ... 2.0 GHz), 1 V/m (2.0 ... 2.7 GHz)
Conducted interference due to burst acc. to IEC 61000-4-4	2 kV signal lines
Conducted interference due to surge acc. to IEC 61000-4-5	DC supply cables: 0.5 kV balanced and unbalanced
Conducted interference due to high-frequency radiation acc. to IEC 61000-4-6	10 V (0.15 ... 80 MHz)

Degree and class of protection	
IP degree of protection	IP20

Standards, approvals, certificates	
CE mark	Yes
UL approval	Yes
RCM (formerly C-TICK)	Yes
KC approval	Yes
EAC (formerly Gost-R)	Yes
China RoHS compliance	Yes
Reference designation according to DIN EN 81346-2	K

Ambient conditions	
Ambient temperature during operation	
• min.	0 °C
• max.	55 °C
Ambient temperature during storage/transportation	
• Storage, min.	-25 °C
• Storage, max.	70 °C
• Transportation, min.	-25 °C
• Transportation, max.	70 °C
Air pressure acc. to IEC 60068-2-13	
• Operation, min.	860 hPa
• Operation, max.	1 080 hPa
• Storage, min.	660 hPa
• Storage, max.	1 080 hPa
Altitude during operation relating to sea level	
• Installation altitude above sea level, max.	2 000 m
Relative humidity	

- Operation at 25 °C, max. 95 %
- Operation at 50 °C, max. 50 %; 95 % at 25 °C, decreasing linearly to 50 % at 50 °C

Vibrations

- Vibration resistance during operation acc. to IEC 60068-2-6 10 ... 58 Hz / 0.075 mm, 58 ... 150 Hz / 1 g
- Vibration resistance during storage acc. to IEC 60068-2-6 5 ... 8.5 Hz / 3.5 mm, 8.5 ... 500 Hz / 1 g

Shock testing

- Shock resistance during operation acc. to IEC 60068-2-27 15 g / 11 ms / 3 shocks/axis
- Shock resistance during storage acc. to IEC 60068-2-29 25 g / 6 ms / 1 000 shocks/axis

Dimensions

Width	27 mm
Height	141 mm
Depth	110 mm

last modified: 06/16/2020