



SIRIUS ACT with PROFINET: fail-safe interface module with 4 DI, 1 DQ (24 V DC), 1 AI (12-bit A/D resolution), 24 V DC, screw terminal, front plate mounting, 1 to 20 terminal modules connectable

product brand name
product designation
product type designation

SIRIUS ACT
Fail-safe interface module for PROFINET
3SU1

Display

display version

- for diagnostic function: Supply voltage monitoring power LED
- status Tx/Rx link

Yes
Yes

General technical data

product function

- reverse polarity protection
- diagnostics function
- alarms
- I&M data

Yes; With polarity change, DI1 ... DI4 may not be connected to (M) pole
Yes
Yes
Yes; I&M0 ... I&M3

firmware version

2.1.1

hardware version

1

configuration function with dataset

Yes

software version with STEP 7 in the TIA Portal required

Integrated in TIA Portal Version 14 SP1 or higher (HSP for V13 and V14)

number of units per rack maximum

20

number of submodules per station maximum

24

power loss [W] typical

0.67 W

insulation voltage rated value

30 V

degree of pollution

3

type of voltage

- of the operating voltage
- of the input voltage

DC
DC

surge voltage resistance rated value

0.8 kV

consumed current

- maximum
- rated value

100 mA
28 mA

protection class IP

IP20, clamping screw tightened

reference code according to IEC 81346-2

K

Substance Prohibitance (Date)

12/19/2016

operating voltage rated value

20.4 V

I2t value

0.008 A²·s

Supply voltage

supply voltage at DC rated value

24 V

Communication/ Protocol

protocol is supported

- PROFINET IO protocol

Yes

• PROFIsafe protocol	Yes
product function at the Ethernet interface	
• Autocrossover	Yes
• Autonegotiation	Yes
protocol at the 1st interface media redundancy protocol	No
product function at the 1st interface PROFINET IO device	Yes
product function of the PROFINET IO device is supported PROFINET system redundancy	No
service as PROFINET IO device	
• prioritized startup	No
• isochronous mode	No
• supports Shared Device	No
• supports PROFIenergy	No
• IRT	No
• MRP	No
• MRPD	No
service for open IE communication	
• LLDP	Yes
• SNMP	Yes
• TCP/IP	Yes
GSD version/revision with PROFINET required	V2.3
transmission mode for Industrial Ethernet	PROFINET with 100 Mbps full duplex (100BASE-TX)
network load class according to PROFINET	1
specification for Security Level 1 test according to PROFINET	Resilient to network loading
Control circuit/ Control	
inrush current maximum	16 A
Galvanic isolation	
galvanic isolation between PROFINET and all other circuits	Yes
Inputs/ Outputs	
number of digital inputs	4
• safety-related	0
number of analog inputs	1
number of digital outputs	1
Connections/ Terminals	
type of electrical connection	screw-type terminals
connectable conductor cross-section for auxiliary contacts	
• solid or stranded	0.2 ... 2.5 mm²
• finely stranded with core end processing	2.5 mm²
connectable conductor cross-section	
• solid	0.2 ... 2.5 mm²
• solid with core end processing	0.2 ... 2.5 mm²
• finely stranded with core end processing	0.25 ... 2.5 mm²
• finely stranded without core end processing	0.2 ... 2.5 mm²
AWG number as coded connectable conductor cross section	30 ... 12
tightening torque with screw-type terminals	0.5 ... 0.6 N·m
Safety related data	
Safety Integrity Level (SIL) according to IEC 61508	3
SIL Claim Limit (subsystem) according to EN 62061	SILCL 3
performance level (PL) according to EN ISO 13849-1	e
category according to EN ISO 13849-1	4
Safe failure fraction (SFF)	99.6 %
PFHD with high demand rate according to EN 62061	0.0000000006 1/h
PFDavg with low demand rate according to IEC 61508	0.0000024
service life maximum	20 a
T1 value according to IEC 61508	1 a
design of the interface	
• Ethernet interface	Yes; for Ethernet services
• Fast Ethernet interface	Yes; PROFINET with 100 Mbps
interface design 1	
• integrated switch	No

• RJ45 (Ethernet)	Yes
number of ports at the 1st interface	1
number of interfaces according to PROFINET	1

Ambient conditions

ambient temperature	
• during operation • during storage	-25 ... +60 °C -40 ... +80 °C
environmental category during operation according to IEC 60721	3M6, 3S2, 3B2, 3K6 (with relative air humidity of 10 ... 95%, no condensation in operation permitted)
explosion protection marking for intrinsic safety of related equipment EEx ia	No
explosion protection marking for intrinsic safety of related equipment EEx ib	No

Installation/ mounting/ dimensions

fastening method of modules and accessories	Front plate mounting
height	80.1 mm
width	40 mm
depth	72.1 mm

Certificates/ approvals

General Product Approval	Functional Safety/Safety of Machinery	Declaration of Conformity
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[Confirmation](#)



[Type Examination Certificate](#)



Test Certificates	other
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[Special Test Certificate](#)

[Type Test Certificates/Test Report](#)

[Environmental Confirmations](#)

[Confirmation](#)

[PROFINET-Certification](#)

Further information

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

<https://www.siemens.com/ic10>

Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3SU1400-1LL10-1BA1>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3SU1400-1LL10-1BA1>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3SU1400-1LL10-1BA1>

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3SU1400-1LL10-1BA1&lang=en



