## **SIEMENS**

## **Data sheet**

## 3SU1400-1LK10-3BA1



SIRIUS ACT with PROFINET: standard interface module with extended inputs and outputs 24 V DC, spring-loaded terminal, front plate mounting, 1 to 20 terminal modules connectable, with additional 1 DQ + 4 DI + 1 AI

product brand name	SIRIUS ACT
product designation	Interface module for PROFINET
product type designation	3SU1
Display	
display version	
<ul> <li>for diagnostic function: Supply voltage monitoring power LED</li> </ul>	Yes
• status Tx/Rx link	Yes
General technical data	
product function	
<ul> <li>reverse polarity protection</li> </ul>	Yes
<ul> <li>diagnostics function</li> </ul>	Yes
• alarms	Yes
● I&M data	Yes; I&M0 I&M3
firmware version	2.1.1
hardware version	1
configuration function with dataset	Yes
software version with STEP 7 required	TIA Portal V13 SP1
software version with STEP 7 in the TIA Portal required	TIA portal V13
number of units per rack maximum	20
number of submodules per station maximum	24
power loss [W] typical	0.6 W
insulation voltage rated value	30 V
degree of pollution	3
type of voltage	
<ul> <li>of the operating voltage</li> </ul>	DC
of the input voltage	DC
surge voltage resistance rated value	0.8 kV
consumed current	
• maximum	150 mA
rated value	28 mA
protection class IP	IP20
reference code according to IEC 81346-2	K
Substance Prohibitance (Date)	08/24/2018
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	

PROFIsafe protocol  Product function at the Ethernet interface  * Autorosposer	PROFINET IO protocol	Yes
Product function at the Ethernet interface   Autoregotiation   Yes   Y	PROFINET IO protocol     PROFISafe protocol	
Autorocosor yes Autorocosor be 1st interface media redundancy protocol protocol at the 1st interface media redundancy protocol protocol at the 1st interface media redundancy protocol protocol at the 1st interface media redundancy protocol protocol function at the 1st interface PROFINET TO device be supported PROFINET Of device is supported PROFINET giston redundancy in proticed startup  protocol startup protoco		INO
- Authoropolation	·	Vec
product at the 1st interface media reduntancy protocol product function at the 1st interface PROFINET to device is supported PROFINET grytom redundancy service as PROFINET to device is supported PROFINET grytom redundancy service as PROFINET to device prioritized startup is isochronous mode supports Shared Device supports PROFINET of the Vice Startup is IRT No MRP		
product function of the 1st interface PROFINET 10 device   Ves		
PROPINET yellow for incidence of the PROFINET O device is supported PROFINET (of device is principle of the PROFINET incidence of the PROFINET (of the PROFINET incidence of the PROFINET incidence of the PROFINET (of the PROFINET incidence of the PROFINET incidence of the PROFINET (of the PROFINET incidence of the PROFINET incidence of the PROFINET incidence of the PROFINET (of the PROFINET incidence of the PROFIN		
PROFINET system redundancy  service as PROFINET (O device  prioritized startup  supports Shared Device  supports Shared Device  supports Shared Device  supports PROFIenergy  No  supports PROFIenergy  No  MRP  No  MRPD  No  SERVICE for open IE communication  LLDP  SSMMP  Yes  SSMMP  Yes  SSMMP  Yes  SSMMP  TOPIP  Yes  SSWMP  TOPIP  PROFINET with 100 Mbps full duplex (100BASE-TX)  Transmission mode for Inclustrial Ethernet  PROFINET with 100 Mbps full duplex (100BASE-TX)  Transmission mode for Inclustrial Ethernet  PROFINET with 100 Mbps full duplex (100BASE-TX)  Transmission mode for Inclustrial Ethernet  PROFINET with 100 Mbps full duplex (100BASE-TX)  Transmission mode for Inclustrial Ethernet  PROFINET with 100 Mbps full duplex (100BASE-TX)  Transmission mode for Inclustrial Ethernet  PROFINET  Specification for Security Level 1 test according to PROFINET  Specification for Security Level 1 test according to PROFINET  Resilient to network loading  Transmission between PROFINET and all other circuits  Specification for Security Level 1 test according to PROFINET  Specification for Security Level 1 test according to PROFINET  Specification for Security Level 1 test according to PROFINET  Specification for Security Level 1 test according to PROFINET  Specification for Security Level 1 test according to PROFINET  Specification for Security Level 1 test according to PROFINET  Specification for Security Level 1 test according to PROFINET  Specification for Security Level 1 test according to PROFINET  Specification for Security Level 1 test according to PROFINET  Specification for Security Level 1 test according to PROFINET  Specification for Security Level 1 test according to PROFINET  Specification for Security Level 1 test according to PROFINET  Specification for Security Level 1 test according to PROFINET  Specification for Security Level 1 test according to PROFINET  Specification for Security Level 1 test according to PROFINET  Specification for Security Level 1 test according to PROFINET  Specification for Se	·	
prioritized startup supports PROFlenergy supports PROFlenergy supports PROFlenergy No No supports PROFlenergy No	·	INO
Signification Standard Device   No   No   No   No   No   No   No   N	service as PROFINET IO device	
Supports PROFlenery	<ul> <li>prioritized startup</li> </ul>	No
■ supports PROFlenergy ■ IRT ■ MRP ■ MRP ■ No ■ MRP ■ No No Service for open IE communication ■ LLDP ■ Service for open IE communication ■ LLDP ■ Service for open IE communication ■ LLDP ■ SNNP ■ TCP/IP ■ Yes ■ STOP/IP ■ Yes ■ SSUBJECT (A STOP SECURITY Level 1 test according to PROFINET ■ Intervork load class according to PROFINET ■ 1 ■ Specification for Security Level 1 test according to PROFINET ■ 1 ■ Septiment Solution ■ PROFINET ■ 1 ■ Selvanic Isolation ■ Selvan	• isochronous mode	No
• IRT • MRP • MRP • MRPD No sorvice for open IE communication • LLDP • SIMJP • SIMJP • TOPJIP • SIMJP • TOPJIP • SONAP • SONA	<ul> <li>supports Shared Device</li> </ul>	No
MRP No	<ul> <li>supports PROFlenergy</li> </ul>	No
MRPD Service for open IE communication  LIDP SINMP SINMP SINMP STOPIIP SOBO version/revision with PROFINET required V2-3 Ltransmission mode for Industrial Ethernet PROFINET 1 specification for Security Level 1 test according to PROFINET PROFINET Control circuit/ Control Inrush current maximum Silvania Isolation between PROFINET and all other circuits galvanic isolation between PROFINET and all other circuits self-virelated self-virelate	• IRT	No
service for open IE communication  LLDP  SNMP  SNMP  TOPAIP  Tyes  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  Insuperification for Security Level 1 test according to PROFINET  Inrush current maximum  In GA  Galivanic Isolation  Javanic Isolation  Java	• MRP	No
• LIDP • SIMIP • TOP/IP • SIMIP • TOP/IP • TOP/I	• MRPD	No
• SNMP • TCP/IP • TCP	service for open IE communication	
*TCP/IP Yes GSD version/revision with PROFINET required V2.3  rtansmission mode for Industrial Ethernet PROFINET with 100 Mbps full duplex (100BASE-TX)  petivork load class according to PROFINET specification for Security Level 1 test according to PROFINET Torritor according to PROFINET  Control circuit' Control  intrush current maximum  Galvanic Isolation galvanic Isolation between PROFINET and all other circuits self-ty-related  o 0  number of digital inputs self-ty-related of number of digital outputs  Oonnectable conductor cross-section for auxiliary contacts solid or stranded self-ty-related over end processing of linely stranded with core end processing of linely stranded with core end processing solid with core end processing solid with core end processing finely stranded with core end processing solid or stranded solid with core end processing solid or stranded wit	• LLDP	Yes
CSD version/revision with PROFINET required   V2.3   V2.5   V2.	• SNMP	Yes
transmission mode for industrial Ethernet network load class according to PROFINET network load class according to PROFINET profile for for Security Level 1 test according to PROFINET  Control circuit/ Control inrush current maximum  16 A  Gitvanic isolation galvanic isolation between PROFINET and all other circuits paysavanic solation galvanic resolation selections/ Terminals type of electrical connection connectable conductor cross-section for auxiliary contacts solid or stranded • finely stranded with core end processing • solid or stranded • finely stranded with core end processing • finely stranded with core end processing • finely stranded without core end	• TCP/IP	Yes
network load class according to PROFINET specification for Security Level 1 test according to PROFINET Ontrol Inrush current maximum (all Advance Isolation galvanic isolation between PROFINET and all other circuits inputs/ Outputs subject of digital inputs safely-related onumber of digital inputs safely-related onumber of digital outputs  Connections/ Terminals  type of electrical connection connectable conductor cross-section for auxiliary contacts solid or stranded infinely stranded with core end processing connectable conductor cross-section solid with core end processing infinely stranded without core end processing infinely stranded with c	GSD version/revision with PROFINET required	V2.3
specification for Security Level 1 test according to PROFINET  Control circuit/ Control  Inrush current maximum  Glavanic isolation  galvanic isolation between PROFINET and all other circuits yes  Inputs/ Outputs  number of digital inputs	transmission mode for Industrial Ethernet	PROFINET with 100 Mbps full duplex (100BASE-TX)
Control circuit/ Control  Inrush current maximum  Galvanic Isolation galvanic Isolation galvanic Isolation galvanic Isolation galvanic Isolation between PROFINET and all other circuits putuals (Dutputs) number of digital Inputs	network load class according to PROFINET	1
inrush current maximum  GalVanic Isolation  galvanic isolation between PROFINET and all other circuits inputs/ Outputs  number of digital inputs  • safety-related  • on  connections/ Terminals  type of electrical connection  connectable conductor cross-section for auxiliary contacts  • solid or stranded  • finely stranded with core end processing  • solid with core end processing  • solid with core end processing  • solid with core end processing  • finely stranded without		Resilient to network loading
Galvanic isolation galvanic isolation between PROFINET and all other circuits inputs/ Outputs	Control circuit/ Control	
galvanic isolation between PROFINET and all other circuits inputs/Outputs  number of digital inputs	inrush current maximum	16 A
number of digital inputs  safety-related number of digital outputs  connections/ Terminals  type of electrical connection spring-loaded terminals  connectable conductor cross-section for auxiliary contacts solid or stranded finely stranded with core end processing 2.5 mm² solid or stranded or solid with core end processing 0.2 2.5 mm² solid or stranded with core end processing 0.2 2.5 mm² finely stranded with core end processing 0.2 2.5 mm² solid with core end processing 0.2	Galvanic isolation	
number of digital inputs	galvanic isolation between PROFINET and all other circuits	Yes
safety-related     onumber of digital outputs  Connections/ Terminals  type of electrical connection spring-loaded terminals  connectable conductor cross-section for auxiliary contacts     solid or stranded	Inputs/ Outputs	
number of digital outputs  Connections/ Terminals  type of electrical connection  connectable conductor cross-section for auxiliary contacts  • solid or stranded • finely stranded with core end processing  connectable conductor cross-section  • solid  • solid with core end processing • solid with core end processing • solid with core end processing • finely stranded with core end processing • finely stranded without core end processing • finely stranded did without core end processing • finely stranded without core end pro	number of digital inputs	
type of electrical connection  connectable conductor cross-section for auxiliary contacts  • solid or stranded • finely stranded with core end processing • solid • solid with core end processing • finely stranded without core end processing • finely stranded	safety-related	0
type of electrical connection  connectable conductor cross-section for auxiliary contacts  • solid or stranded with core end processing  connectable conductor cross-section  • solid  • solid 0.2 2.5 mm²  • solid 0.2 2.5 mm²  • solid with core end processing 0.2 2.5 mm²  • finely stranded with core end processing 0.2 2.5 mm²  • finely stranded with core end processing 0.2 2.5 mm²  • finely stranded with core end processing 0.2 2.5 mm²  • finely stranded without core end processing 0.2 2.5 mm²  • finely stranded without core end processing 0.2 2.5 mm²  • Enemet as coded connectable conductor cross section 2 12  Sefety related data  service life maximum 20 a  design of the interface  • Ethernet interface  • Ethernet interface  • Ethernet interface  • Ethernet interface  • Fast Ethernet of ports at the 1st interface  number of ports at the 1st interface  1 number of ports at the 1st interface  number of interfaces according to PROFINET  1 Ambient conditions  ambient temperature  • during operation  • during storage  explosion protection marking for intrinsic safety of related  No	number of digital outputs	0
connectable conductor cross-section for auxiliary contacts  • solid or stranded  • finely stranded with core end processing  connectable conductor cross-section  • solid  • solid with core end processing  • solid with core end processing  • finely stranded with core end processing  • finely stranded with core end processing  • finely stranded without core end processing  • 25 2.5 mm²  AWG number as coded connectable conductor cross  section  Safety related data  service life maximum  20 a  design of the interface  • Ethernet interface  • Ethernet interface  • Fast Ethernet interface  • Interface design 1  • integrated switch  • R.J.45 (Ethernet)  Yes  number of ports at the 1st interface  1  number of ports at the 1st interface  1  number of interfaces according to PROFINET  1  Ambient conditions  ambient temperature  • during operation  • during storage  explosion protection marking for intrinsic safety of related	Connections/ Terminals	
solid or stranded     finely stranded with core end processing     2.5 mm²  connectable conductor cross-section     solid     solid with core end processing     solid without core end processing     solid with core end processing	type of electrical connection	spring-loaded terminals
• finely stranded with core end processing  connectable conductor cross-section     • solid     • solid	connectable conductor cross-section for auxiliary contacts	
connectable conductor cross-section  • solid  • solid with core end processing  • finely stranded with core end processing  • finely stranded without core end processing  • 26 2.5 mm²  AWG number as coded connectable conductor cross section  Safety related data  service life maximum  design of the interface  • Ethernet interface  • Ethernet interface  • Fast E	solid or stranded	0.2 2.5 mm <sup>2</sup>
solid     solid with core end processing     s	finely stranded with core end processing	2.5 mm²
• solid with core end processing • finely stranded with core end processing • finely stranded without core end processing • finely stranded without core end processing • finely stranded without core end processing  AWG number as coded connectable conductor cross section  Safety related data  service life maximum  design of the interface • Ethernet interface • Ethernet interface • Fast Ethernet interface • Fast Ethernet interface  integrated switch • RJ45 (Ethernet)  number of ports at the 1st interface  number of interfaces according to PROFINET  Ambient conditions  ambient temperature • during operation • during storage  explosion protection marking for intrinsic safety of related  No	connectable conductor cross-section	
• finely stranded with core end processing     • finely stranded without core end processing     • finely stranded without core end processing  AWG number as coded connectable conductor cross section  Safety related data  service life maximum  design of the interface     • Ethernet interface     • Fast Ethernet interface     • Interface design 1     • integrated switch     • RJ45 (Ethernet)     • RJ45 (Ethernet)     • Rumber of ports at the 1st interface  number of interfaces according to PROFINET  Ambient conditions  ambient temperature     • during operation     • during storage  explosion protection marking for intrinsic safety of related  No	• solid	0.2 2.5 mm²
• finely stranded without core end processing  AWG number as coded connectable conductor cross section  Safety related data  service life maximum  design of the interface      • Ethernet interface     • Fast Ethernet interface     • Fast Ethernet interface     • Fast Ethernet interface     • Interface design 1     • integrated switch     • RJ45 (Ethernet)     rumber of ports at the 1st interface  number of interfaces according to PROFINET  Ambient conditions  ambient temperature     • during operation     • during storage  explosion protection marking for intrinsic safety of related  Page 26 12  26 12  26 12  28 12  29 a  29	<ul> <li>solid with core end processing</li> </ul>	0.2 2.5 mm²
AWG number as coded connectable conductor cross section  Safety related data  service life maximum  design of the interface  Ethernet interface Fast Ethernet interface Fast Ethernet interface  interface design 1  interface design 1  interface design 1  integrated switch RJ45 (Ethernet) Yes  number of ports at the 1st interface  number of interfaces according to PROFINET  Ambient conditions  ambient temperature  during operation during storage  explosion protection marking for intrinsic safety of related	<ul> <li>finely stranded with core end processing</li> </ul>	0.25 2.5 mm <sup>2</sup>
Safety related data  service life maximum  design of the interface  Ethernet interface Fast Ethernet services Fast Ether	finely stranded without core end processing	0.2 2.5 mm²
service life maximum  design of the interface  • Ethernet interface  • Fast Ethernet interface  • Interface design 1  • Integrated switch  • RJ45 (Ethernet)  No  • RJ45 (Ethernet)  number of ports at the 1st interface  number of interfaces according to PROFINET  1  Ambient conditions  ambient temperature  • during operation  • during storage  • during storage  explosion protection marking for intrinsic safety of related		26 12
service life maximum  design of the interface  • Ethernet interface  • Fast Ethernet interface  • Interface design 1  • integrated switch  • RJ45 (Ethernet)  • RJ45 (Ethernet)  • Yes  number of ports at the 1st interface  number of interfaces according to PROFINET  1  Ambient conditions  ambient temperature  • during operation  • during storage  • during storage  explosion protection marking for intrinsic safety of related  No		
design of the interface  • Ethernet interface  • Fast Ethernet interface  • Interface design 1  • integrated switch  • RJ45 (Ethernet)  • RJ45 (Ethernet)  • RJ45 (Ethernet)  • Inumber of ports at the 1st interface  • Inumber of interfaces according to PROFINET  • Interface design 1		20 a
Ethernet interface Fast Ethernet interface Fast Ethernet interface Yes; for Ethernet services Yes; PROFINET with 100 Mbps  Interface design 1  In		20 a
Fast Ethernet interface  interface design 1  integrated switch  RJ45 (Ethernet)  number of ports at the 1st interface  number of interfaces according to PROFINET  Ambient conditions  ambient temperature  during operation  during storage  explosion protection marking for intrinsic safety of related  Yes; PROFINET with 100 Mbps  No		Voc. for Ethernet convince
interface design 1  integrated switch  RJ45 (Ethernet)  number of ports at the 1st interface  number of interfaces according to PROFINET  Ambient conditions  ambient temperature  during operation  during storage  explosion protection marking for intrinsic safety of related  No		
<ul> <li>integrated switch</li> <li>RJ45 (Ethernet)</li> <li>number of ports at the 1st interface</li> <li>number of interfaces according to PROFINET</li> <li>Ambient conditions</li> <li>ambient temperature</li> <li>during operation</li> <li>during storage</li> <li>explosion protection marking for intrinsic safety of related</li> <li>No</li> </ul>		100, 1 NOT INC. WILL TOO MODO
● RJ45 (Ethernet)  number of ports at the 1st interface  number of interfaces according to PROFINET  Ambient conditions  ambient temperature  ● during operation  ● during storage  explosion protection marking for intrinsic safety of related  Yes  1  1  -25 +60 °C  -40 +80 °C	•	No
number of ports at the 1st interface  number of interfaces according to PROFINET  1  Ambient conditions  ambient temperature  • during operation  • during storage  explosion protection marking for intrinsic safety of related  1  1  1  1  1  1  1  1  1  1  1  1  1		
number of interfaces according to PROFINET  Ambient conditions  ambient temperature  • during operation • during storage  • during storage  explosion protection marking for intrinsic safety of related  1  -25 +60 °C  -40 +80 °C		
Ambient conditions  ambient temperature  • during operation • during storage  explosion protection marking for intrinsic safety of related  Ambient conditions  -25 +60 °C  -40 +80 °C  No		
ambient temperature		
<ul> <li>during operation</li> <li>during storage</li> <li>explosion protection marking for intrinsic safety of related</li> </ul> -25 +60 °C -40 +80 °C No		
• during storage -40 +80 °C  explosion protection marking for intrinsic safety of related No	•	25 ±60 °C
explosion protection marking for intrinsic safety of related No		
		INO

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	

Certificates/ approvals

General Product Approval Declaration of Conformity Test Certificates

Confirmation









Special Test Certificate

Test Certificates other Environment

Type Test Certificates/Test Report Confirmation

PROFINET-Certification Environmental Confirmations

## Further information

Siemens has decided to exit the Russian market (see here).

https://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business

Siemens is working on the renewal of the current EAC certificates.

Please contact your local Siemens office on the status of validity of the EAC certification if you intend to import or offer to supply these products to an EAC relevant market (other than the sanctioned EAEU member states Russia or Belarus).

Information on the packaging

https://support.industry.siemens.com/cs/ww/en/view/109813875

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=3SU1400-1LK10-3BA1

Cax online generator

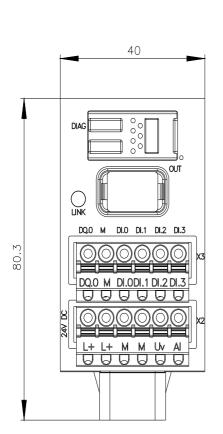
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3SU1400-1LK10-3BA1

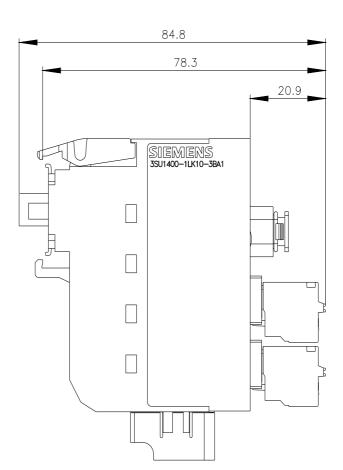
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

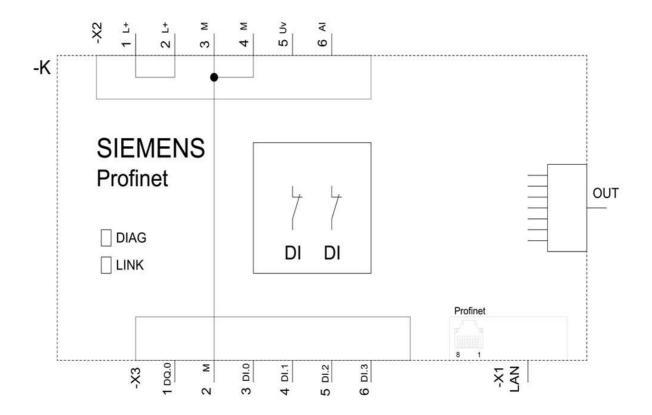
https://support.industry.siemens.com/cs/ww/en/ps/3SU1400-1LK10-3BA1

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

http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3SU1400-1LK10-3BA1&lang=en







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