

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



<b>Product brand name</b>	SIRIUS ACT
<b>Product designation</b>	Fail-safe interface module for PROFINET
<b>Product type designation</b>	3SU1

**Display**

<b>Display version</b>	
<ul style="list-style-type: none"> <li>• for diagnostic function: Supply voltage monitoring Power LED</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• status Tx/Rx link</li> </ul>	Yes

**General technical data**

<b>Product function</b>	
<ul style="list-style-type: none"> <li>• Reverse polarity protection</li> </ul>	Yes; With polarity change, DI1 ... DI4 may not be connected to (M) pole
<ul style="list-style-type: none"> <li>• Diagnostics function</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• Alarms</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• I&amp;M data</li> </ul>	Yes; I&M0 ... I&M3
<b>Firmware version</b>	1.0.0
<b>Hardware version</b>	1
<b>Configuration function with dataset</b>	Yes

<b>Software version with STEP 7 in the TIA Portal required</b>	Integrated in TIA Portal Version 14 SP1 or higher (HSP for V13 and V14)
<b>Number of units per rack maximum</b>	20
<b>Number of submodules per station maximum</b>	24
<b>Power loss [W] typical</b>	0.67 W
Insulation voltage rated value	30 V
<b>Degree of pollution</b>	3
<b>Type of voltage</b>	
• of the operating voltage	DC
• of the input voltage	DC
<b>Surge voltage resistance rated value</b>	0.8 kV
<b>Consumed current</b>	
• maximum	100 mA
• Rated value	28 mA
<b>Protection class IP</b>	IP20
<b>Reference code acc. to DIN EN 81346-2</b>	K
Operating voltage rated value	20.4 V
<b>I<sup>2</sup>t value</b>	0.008 A <sup>2</sup> ·s

#### Supply voltage

Supply voltage at DC Rated value	24 V
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#### Communication/ Protocol

<b>Protocol is supported</b>	
• PROFINET IO protocol	Yes
• PROFINET IO protocol	Yes
<b>Product function at the Ethernet interface</b>	
• Autocrossover	Yes
• Autonegotiation	Yes
<b>Protocol at the 1st interface</b>	
• media redundancy protocol	No
<b>Product function at the 1st interface</b>	
• PROFINET IO device	Yes
<b>Product function of the PROFINET IO device is supported PROFINET system redundancy (S2)</b>	No
<b>Service as PROFINET IO device</b>	
• prioritized startup	No
• isochronous mode	No
• supports Shared Device	No
• supports PROFINET energy	No
• IRT	No
• MRP	No
• MRPD	No
<b>Service for open IE communication</b>	

• LLDP	Yes
• SNMP	Yes
• TCP/IP	Yes
<b>GSD version/revision with PROFINET required</b>	V2.3
<b>Transmission mode for Industrial Ethernet</b>	PROFINET with 100 Mbps full duplex (100BASE-TX)
<b>Network load class acc. to PROFINET</b>	1
<b>Specification for Security Level 1 test acc. to PROFINET</b>	Resilient to network loading

#### Control circuit/ Control

<b>Inrush current maximum</b>	16 A
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#### Galvanic isolation

Galvanic isolation between PROFINET and all other circuits	Yes
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#### Inputs/ Outputs

<b>Number of digital inputs</b>	4
• safety-related	0
<b>Number of analog inputs</b>	1
<b>Number of digital outputs</b>	1

#### Connections/ Terminals

<b>Type of electrical connection</b>	screw-type terminals
<b>Connectable conductor cross-section for auxiliary contacts</b>	
• single or multi-stranded	0.2 ... 2.5 mm <sup>2</sup>
• finely stranded with core end processing	2.5 mm <sup>2</sup>
<b>Connectable conductor cross-section</b>	
• solid	0.2 ... 2.5 mm <sup>2</sup>
• solid with core end processing	0.2 ... 2.5 mm <sup>2</sup>
• finely stranded with core end processing	0.25 ... 2.5 mm <sup>2</sup>
• finely stranded without core end processing	0.2 ... 2.5 mm <sup>2</sup>
<b>AWG number as coded connectable conductor cross section</b>	30 ... 12
Tightening torque with screw-type terminals	0.5 ... 0.6 N·m

#### Safety related data

Safety Integrity Level (SIL) acc. to IEC 61508	3
SIL Claim Limit (subsystem) acc. to EN 62061	SILCL 3
Performance level (PL) acc. to EN ISO 13849-1	e
Category acc. to EN ISO 13849-1	4
<b>Safe failure fraction (SFF)</b>	99.6 %
<b>PFHD with high demand rate acc. to EN 62061</b>	0.0000000006 1/h
<b>PFDAvg with low demand rate acc. to IEC 61508</b>	0.0000024
<b>Service life maximum</b>	20 y

T1 value acc. to IEC 61508	1 y
<b>Design of the interface</b>	
• Ethernet interface	Yes; for Ethernet services
• Fast Ethernet interface	Yes; PROFINET with 100 Mbps
<b>Interface design 1</b>	
• integrated switch	No
• RJ45 (Ethernet)	Yes
<b>Number of ports at the 1st interface</b>	1
Number of interfaces acc. to PROFINET	1




#### Ambient conditions

Environmental category during operation acc. to IEC 60721	3M6, 3S2, 3B2, 3K6 (with relative air humidity of 10 ... 95 %, no condensation in operation permitted)
<b>Explosion protection marking for intrinsic safety of related equipment EEx ia</b>	No
<b>Explosion protection marking for intrinsic safety of related equipment EEx ib</b>	No

#### Installation/ mounting/ dimensions

Mounting type of modules and accessories	Front plate mounting
<b>Height</b>	80.1 mm
<b>Width</b>	40 mm
<b>Depth</b>	72.1 mm

#### Certificates/ approvals

General Product Approval	Functional Safety/Safety of Machinery	Declaration of Conformity	Test Certificates
 UL		 EG-Konf.	
	<a href="#">Type Examination Certificate</a>	<a href="#">Miscellaneous</a>	<a href="#">Type Test Certificates/Test Report</a>

Test Certificates	other
<a href="#">Special Test Certificate</a>	<a href="#">Confirmation</a>

#### Further information

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

[www.siemens.com/ic10](http://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**

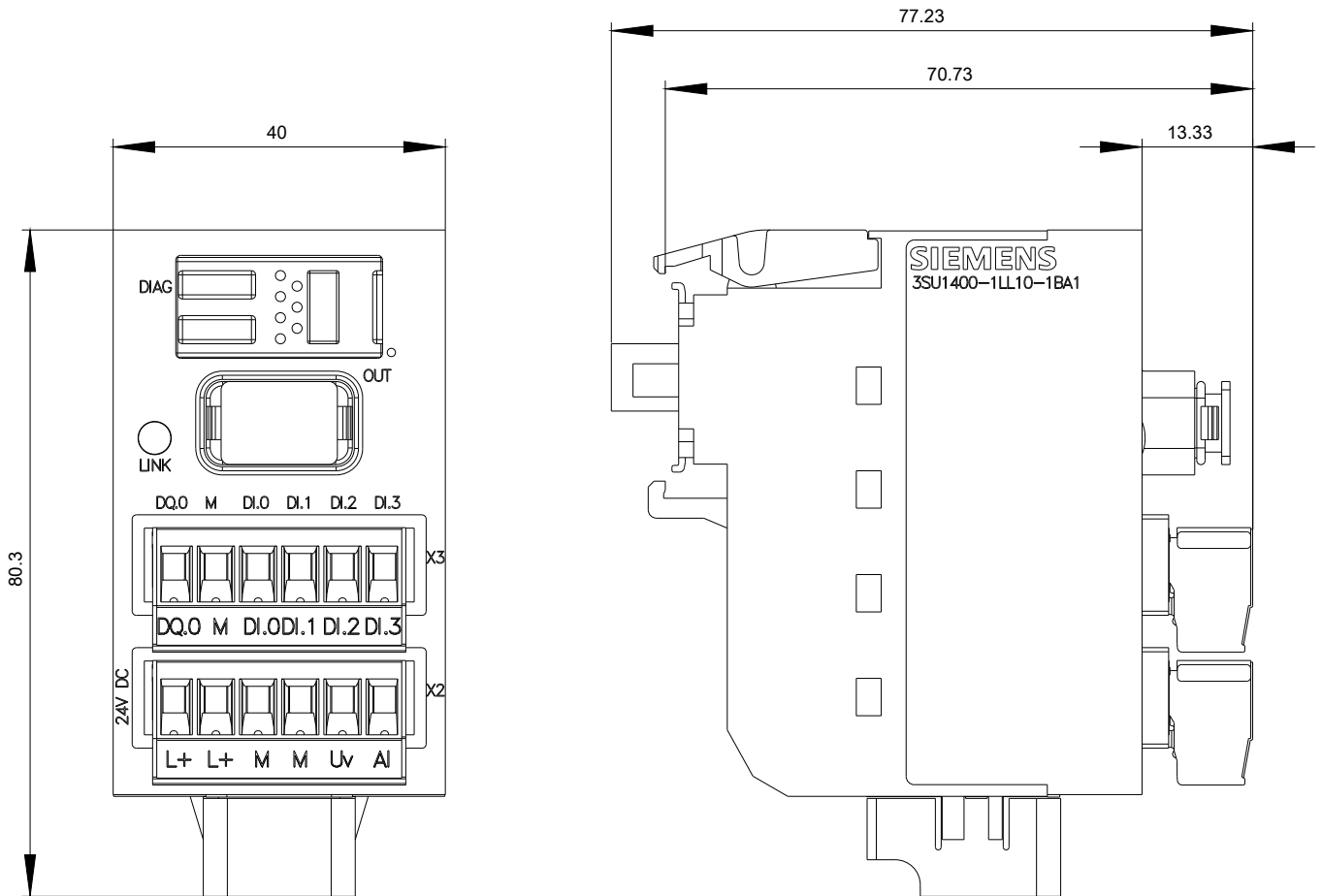
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mfb=3SU1400-1LL10-1BA1>

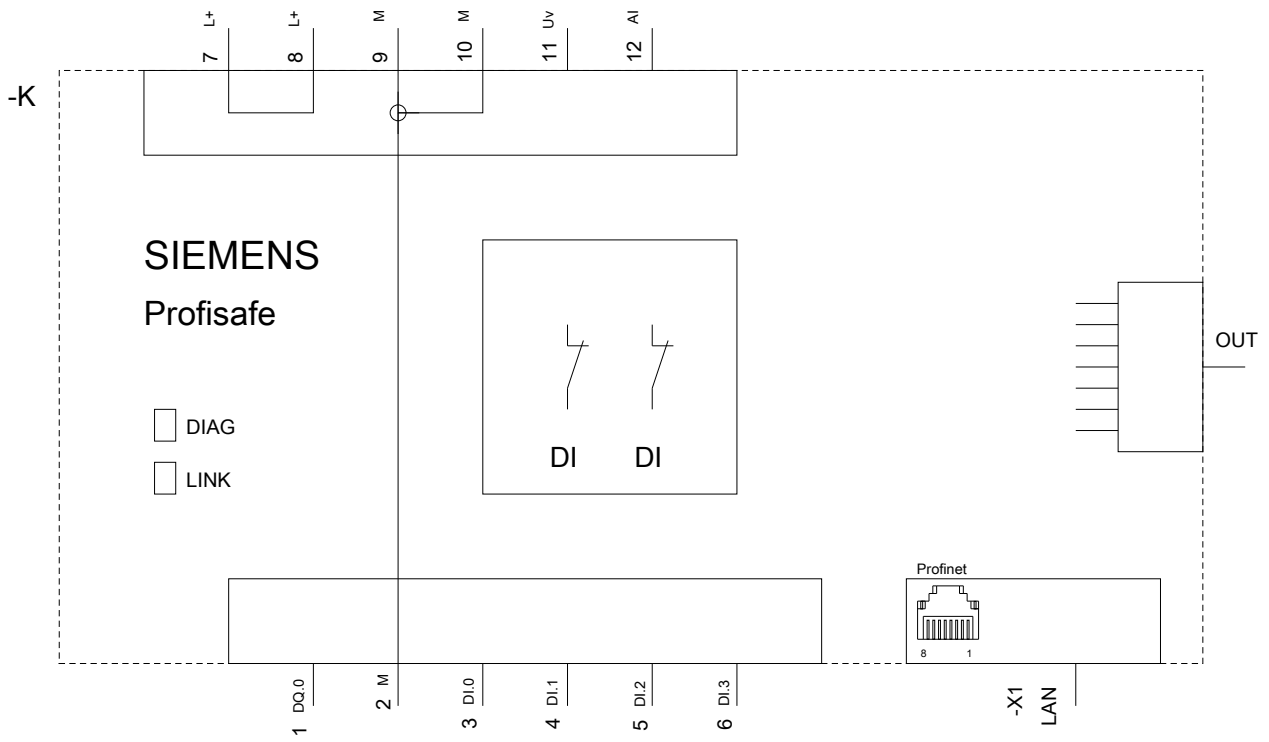
**Service&Support (Manuals, Certificates, Characteristics, FAQs,...)**

<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?mfb=3SU1400-1LL10-1BA1&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mfb=3SU1400-1LL10-1BA1&lang=en)





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