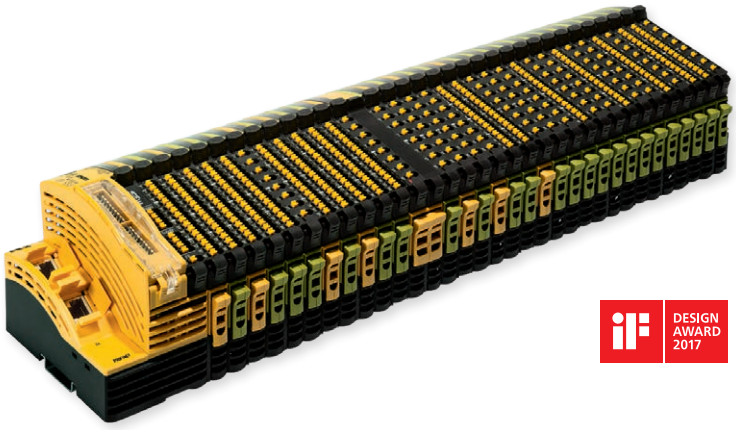
Remote I/O system PSSuniversal 2

The PSSuniversal 2 remote I/O system is the new generation of universal systems from Pilz. PSSuniversal 2 offers flexibility, openness and granularity in a single system for safety and automation. You can choose between a communication module with PROFINET/PROFIsafe or EtherNet/IP, CIP Safety interface and analogue, digital, safety-related, non-safety-related I/O modules. The three-part system structure offers user-friendly installation and servicing.





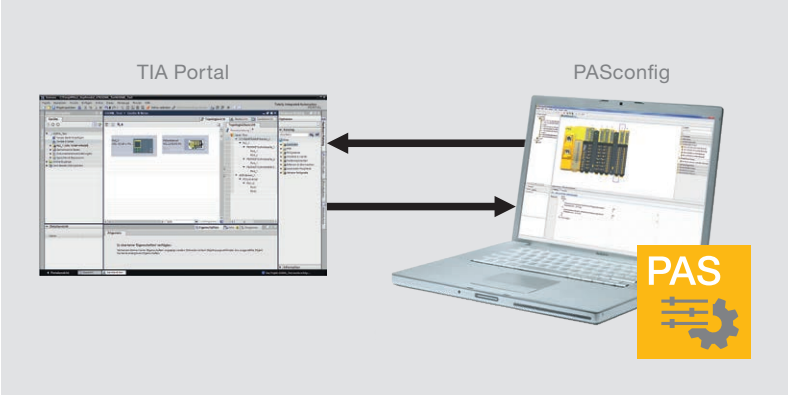


Your benefits at a glance

- Easy, flexible and granular:
  - Optimised handling during commissioning and service
  - Three-part system structure reduces servicing work
- Compact:
  - Minimum dimensions due to maximum packing density, with up to 16 channels on 12.5 mm
- Functional safety as a basic function:
  - Design of safety and standard functions that can be combined at will
- Precise diagnostics:
  - Concordant display of the faulty module slot and the terminal affected
  - Rapid fault localisation and troubleshooting
- Openness:
  - Ability to adapt to PROFINET/PROFIsafe, EtherNet/IP, CIP Safety and more by exchanging the head module
  - Safe I/O modules universally usable in an identical manner for a wide variety of safety protocols

Simple configuration

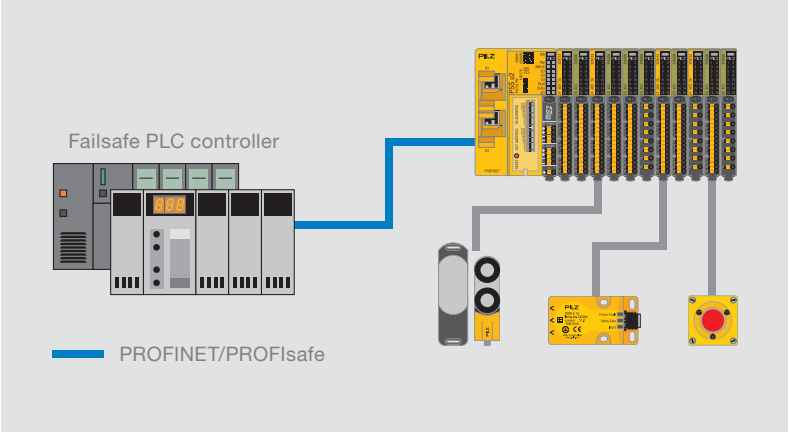
The remote I/O system PSSuniversal 2 is configured using the new software PASconfig. This software allows you to put the system into operation quickly and simply. PASconfig can be called up directly from the Tool Calling Interface of the TIA portal.



Software tool PASconfig for advanced configuration from the TIA Portal.

Improved mechanical design

The new three-part system design significantly reduces the work involved in service and maintenance. Diagnostics can be performed with great precision in the remote I/O system. Modules can be hot-swapped. As a result the head module can be swapped without having to reconfigure. It is no longer necessary to completely dismantle the system to swap the backplane. PSSuniversal 2 offers a high level of operating safety thanks to individual coding.



Standard and safety-related connection via PROFINET/PROFIsafe.

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Webcode: web150509

Online information at www.pilz.com



Connection to IO-Link devices possible

IO-Link

A module with IO-Link master is available for the remote I/O system PSSuniversal 2 which can be integrated into PROFINET/PROFIsafe and EtherNet/IP, CIP Safety networks using appropriate head modules. The module provides four IO-Link ports to which you can connect IO-Link devices (sensors or actuators). This means that the remote I/O system PSSuniversal 2 can now also communicate with sensors and actuators via the globally standardised IO-Link interface (IEC 61131-9). The configuration of the IO-Link devices can be stored in the IO-Link master and simply transferred when exchanging during service. This saves time and reduces errors and plant downtimes!

Technical details – PSSuniversal 2

Remote I/O system PSSuniversal 2 – head module



PSS u2 P0 F/S PN

Type	Communication interfaces	Application area	
		Failsafe functions	Automation functions
PSS u2 P0 F/S PN	2 x PROFINET/PROFIsafe	◆	◆
PSS u2 P0 F/S EIP	2 x EtherNet/IP, CIP Safety	◆	◆

Backplanes/module racks



PSS u2 B 4

Type	Function	Application area	
		Failsafe functions	Automation functions
PSS u2 B 4	Module rack with 4 slots	◆	◆
PSS u2 B 1	Module rack with 1 slot	◆	◆

Supply modules/junction modules



PSS u2 ES 16PT 0V

Type	Function
PSS u2 ES 16PT 0V	Standard patch terminal module, 0 V supply, 16x
PSS u2 ES 16PT FE	Standard patch terminal module, functional earth, shield connection, 16x
PSS u2 ES 16PTD 24V	Standard patch terminal module, 24 V supply, with diagnostic capabilities, 16x
PSS u2 ES 8PTD 24V 0V	Standard patch terminal module, 24 V supply, 0 V supply, with diagnostic capabilities, 16x
PSS u2 ES PSP	Voltage supply module, 24 V/8 A periphery supply

Features	Certification	Order number	Suitable terminal block
▸ Head module PROFINET Client/PROFIsafe Device ▸ Integrated Ethernet switch (two Ethernet ports) ▸ Can be configured using the PASconfig tool ▸ PSS u2 backplane bus for connecting up to 64 I/O modules ▸ Dimensions (H x W x D) in mm: 110.1 x 64.1 x 94.7	CE, TÜV, cULus Listed	328061	328831
▸ Head module EtherNet/IP Client/CIP Safety Device ▸ Integrated Ethernet switch (two Ethernet ports) ▸ Can be configured using the PASconfig tool ▸ PSS u2 backplane bus for connecting up to 64 I/O modules ▸ Dimensions (H x W x D) in mm: 110.1 x 64.1 x 94.7	CE, TÜV, cULus Listed	328071	328831

Features	Certification	Order number
▸ Backplane and module supply ▸ Dimensions (H x W x D) in mm: 107.0 x 53.9 x 32.9	CE, cULus Listed, UL	328810
▸ Backplane and module supply ▸ Dimensions (H x W x D) in mm: 107.0 x 16.4 x 32.9	CE, cULus Listed, UL	328811

Features	Certification	Order number	Suitable terminal block
16 terminal connections, 0 V potential	CE, cULus Listed	328090	328850
16 terminal connections, functional earth	CE, cULus Listed	328091	328850
16 terminal connections, 24 VDC/0.5 A	CE, cULus Listed	328085	328850
▸ 8 terminal connections, 0 V ▸ 8 terminal connections, 24 VDC/0.5 A	CE, cULus Listed	328092	328850
Infeed of periphery voltage 24 VDC, max. 8 A	CE, cULus Listed	328080	328840

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Technical details – PSSuniversal 2

Digital inputs and outputs



PSS u2
EF 2DO R 8A



PSS u2 ES 4DI

Type	Function	Application area	
		Failsafe functions	Automation functions
PSS u2 EF 8DI	8 digital inputs	◆	
PSS u2 EF 8DO 0.5A	8 digital outputs	◆	
PSS u2 EF 4DO 2A	4 digital outputs	◆	
PSS u2 EF 2DO TP 2A	2 digital outputs	◆	
PSS u2 EF 2DO R 8A	2 relay outputs	◆	
PSS u2 ES 4DID	4 digital inputs		◆
PSS u2 ES 8DID	8 digital inputs		◆
PSS u2 ES 4DI	4 digital inputs		◆
PSS u2 ES 8DI	8 digital inputs		◆
PSS u2 ES 4DOD 0.5A	4 digital outputs		◆
PSS u2 ES 8DOD 0.5A	8 digital outputs		◆
PSS u2 ES 16DOD 0.5A	16 digital outputs		◆
PSS u2 ES 4DOD 2A	4 digital outputs		◆
PSS u2 ES 16 DI	16 digital inputs		◆
PSS u2 ES 4DO SR 0.5A	4 relay outputs		◆
PSS u2 ES 4AI U	4 analogue inputs		◆
PSS u2 ES 4DO R 8A	4 relay outputs		◆
PSS u2 ES 4AI I	4 analogue inputs		◆
PSS u2 ES 4AO U/I	4 analogue outputs		◆
PSS u2 ES 4IOL	4 IO-Link master interfaces		◆
PSS u2 ES 8DI NPN	8 NPN inputs		◆
PSS u2 ES 6DI 120V AC	6 digital inputs		◆

Features	Certification	Order number	Suitable terminal block
8 digital inputs (24 V), 8/4 test pulse outputs	CE, TÜV, cULus Listed	328101	328850
8 positive switching semiconductor outputs, max. 0.5 A	CE, TÜV, cULus Listed	328131	328850
4 positive switching semiconductor outputs, max. 2 A	CE, TÜV, cULus Listed	328133	328840
2 semiconductor outputs, 2-pole, max. 2 A	CE, TÜV, cULus Listed	328140	328840
2 N/O contacts, 250 VAC/10 A, 24 V/10 A	CE, TÜV, cULus Listed	328150	328840
4 digital inputs (24 V), extended diagnostics	CE, cULus Listed	328310	328840
8 digital inputs (24 V), extended diagnostics	CE, cULus Listed	328311	328850
4 digital inputs (24 V)	CE, cULus Listed	328300	328840
8 digital inputs (24 V)	CE, cULus Listed	328301	328840
4 positive switching semiconductor outputs, max. 0.5 A, extended diagnostics	CE, cULus Listed	328400	328840
8 positive switching semiconductor outputs, max. 0.5 A, extended diagnostics	CE, cULus Listed	328401	328850
16 positive switching semiconductor outputs, max. 0.5 A, extended diagnostics	CE, cULus Listed	328402	328850
4 positive switching semiconductor outputs, max. 2 A, extended diagnostics	CE, cULus Listed	328410	328840
16 digital inputs (24 V)	CE, cULus Listed	328303	328850
4 N/O contacts, C/O contacts	CE, cULus Listed	328421	328850
4 analogue inputs (voltage measurement)	CE, cULus Listed	328500	328850
4 N/O contacts	CE, cULus Listed	328420	328840
4 analogue inputs (current measurement)	CE, [1]	328520	328850
4 analogue outputs (0 … 10 V, -12 … 12 V; 0 … 20 mA, -24 … 24 mA)	CE, [1]	328551	328850
4 IO-Link ports v1.1	CE, IO-Link, [1]	328770	328850
8 digital NPN inputs (type 3)	CE, [1]	328206	328840
6 digital inputs (120 V)	CE, cULus Listed	328308	328840

[1] Approval for the North American market is currently in preparation

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Technical details – PSSuniversal 2

Accessories



PSS u2 A LA E1

Type	Function
PSS u2 A LC E1 (10 pcs.)	Label holder 23.5 x 10.5 mm, 10 pcs.
PSS u2 A LC E2 (10 pcs.)	Label holder 103 x 10.5 mm, 10 pcs.
PSS u2 A LC T3 (10 pcs.)	Label holder for terminal block, 61 x 11.5 mm, 10 pcs.
PSS u2 A CE E (10 pcs.)	Coding element, 10 pcs.
PSS u2 A CE T (10 pcs.)	Coding strip, 10 pcs.
PSS u2 A SH 4 (10 pcs.)	Shield connection element for backplane/module rack with 4 slots (pack of 10)
PSS u2 A LA E1 (10 pcs.)	Label strips 23.5 x 10.5 mm (10 DIN A4 sheets)
PSS u2 A LA E2 (10 pcs.)	Label strips 103 x 10.5 mm (10 DIN A4 sheets)
PSS u2 T 8 (1 pc.)	8-pin terminal block, scope: 1 piece
PSS u2 T 8 (10 pcs.)	8-pin terminal block, scope: 10 pieces
PSS u2 T 8 (5 x 10 pcs.)	8-pin terminal block, scope: 50 pieces
PSS u2 T 9 SD (1 pc.)	9-pin terminal block for head module, scope: 1 piece
PSS u2 T 16 (1 pc.)	16-pin terminal block, scope: 1 piece
PSS u2 T 16 (10 pcs.)	16-pin terminal block, scope: 10 pieces
PSS u2 T 16 (5 x 10 pcs.)	16-pin terminal block, scope: 50 pieces
µSD Card 512 MB industrial	microSD memory card 512 MB

	Certification	Order number
	-	328910
	-	328911
	-	328912
	-	328860
	-	328861
	-	328820
	-	328913
	-	328914
	cURus	328840
	cURus	328841
	cURus	328842
	cURus	328831
	cURus	328850
	cURus	328851
	cURus	328852
	CE	328835

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