SIEMENS

Interface Module Adapter

SIMATIC S7-300, 400 and 1500



Innovation on economical base

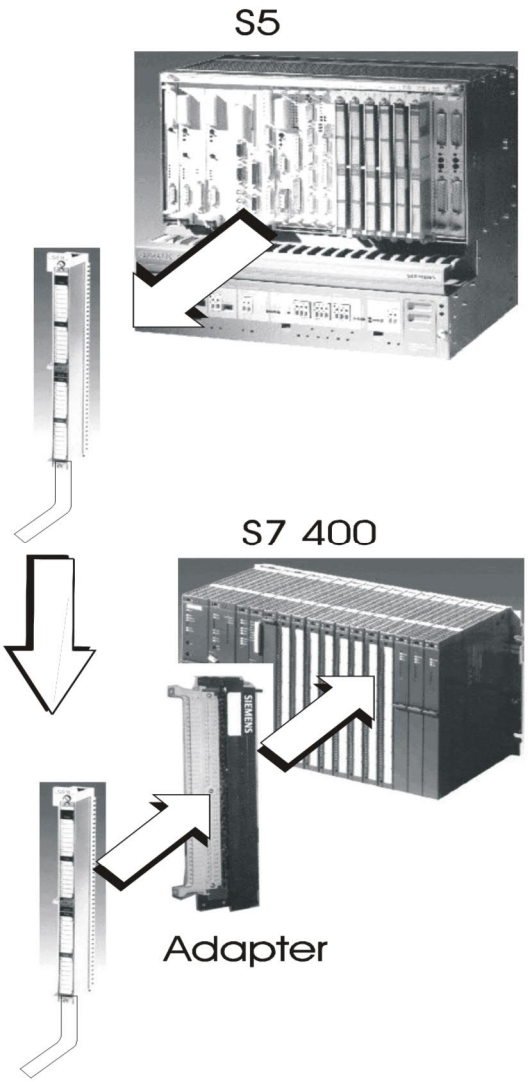
When we are talking to our customers there always seems to be a common problem: many plants are still operating with automation systems of the previous generation and although the performance is still sufficient, it will become increasingly difficult to get spare parts and to have an efficient service in the future.

To be up to date, it will be necessary to replace the existing system with a modern unit. But quite often this decision is delayed by the fear of disruption of the running production and the inconvenience of long-term trouble shooting in case of incorrect wiring.

Retrofit at ease

The Interface Module Adapter for SIMATIC S7-300 or SIMATIC S7-400 links the old with the new, field proven production systems with the latest achievements in automation systems.
You simply take off the front plug of the I/O units, replace the automation system by a S7, plug in the IMA and fix the front plug back on to the adapter. All is done easily by plug-ins. And after actualisation of the STEP 7 software you can continue with you production.

Example: S7-400



Advantages are obvious

- There are low engineering costs in the hardware, only a replacement of the controller is necessary. All wiring remains at ist place
- Schematic diagrams don't have to be revised; signal lists are automatically updated by the software.
- The shutdown time of the production is reduced.

This procedure not only saves a lot of time and money, but also reduces errors.

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Adapters S7-300/400 to S7-1500 do not have an UL-certificate up to now.

Types of controllers



The use of IMA is provided for the following controllers:

· S5 115 U

· S5 130 W/K

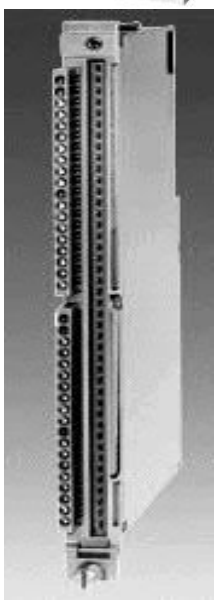
· S5 135 U

· S5 150 U

· S5 155 S/U

· S5 150 K

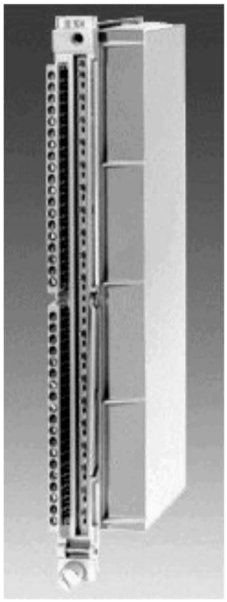
Automation device is the S7-300, S7-400 or S7-1500.



Digital Input:

The digital inputs are classified by the following technical features:

- Number of channels: 8/16/32
- Potential separation: internal / external
- Grouping of channels: 1/4/8/16/32
- Signal voltage: TTL/24=/60=/115~/230~
- Switching frequency
- Type of connector: Screw/Crimp 42/20-poles
- Space requirement: single / double space
- Interrupt signal
- Enable signal
- Unit encoding
- Address encoding



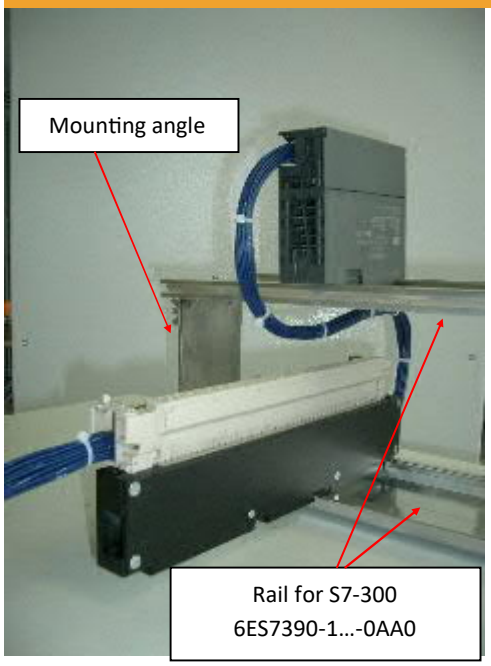
Digital Output:

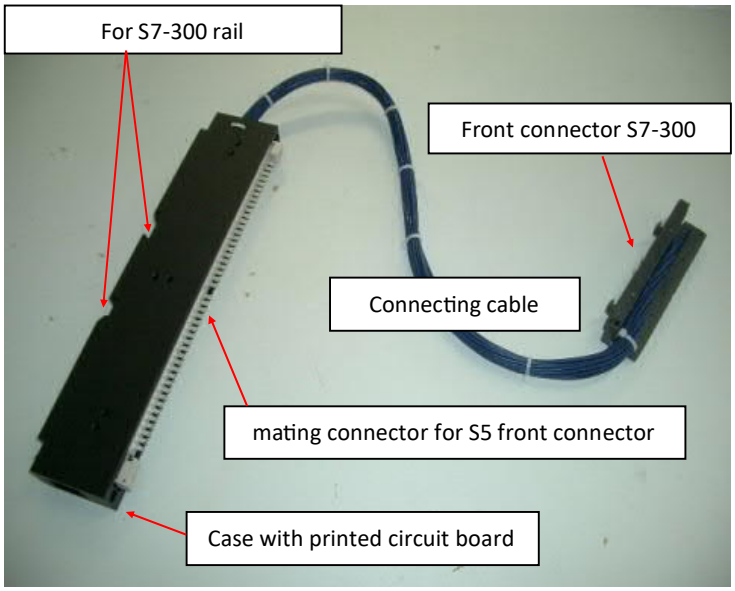
The digital outputs are classified by the following technical features:

- Number of channels: 8/16/32
- Potential separation: internal / external
- Grouping of channels: 1/4/8/16/32
- Signal voltage: TTL/24=/60=/115~/230~
- Switching frequency
- Type of connector: Screw/Crimp 42/20-poles
- Space requirement: single / double space
- Short circuit protection: none / fuse / electronic
- Switching Capacity: 0,1/0,5/2A
- Voltage limitation
- Unit encoding
- Address encoding

All these specifications must be considered before replacement.

Structure with S7-300









Technical data:

Case with printed circuit board : H x B x T = 330 x 27 x 70 mm

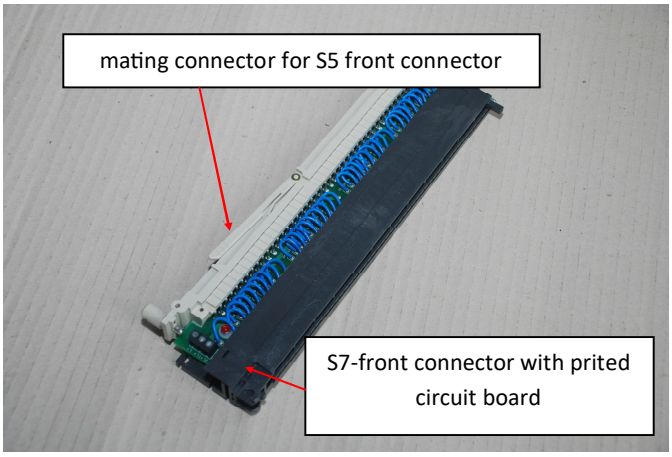
Connecting cable: l= 500mm

Mounting angle Set: H = 150 to 280 mm, B = 80 mm

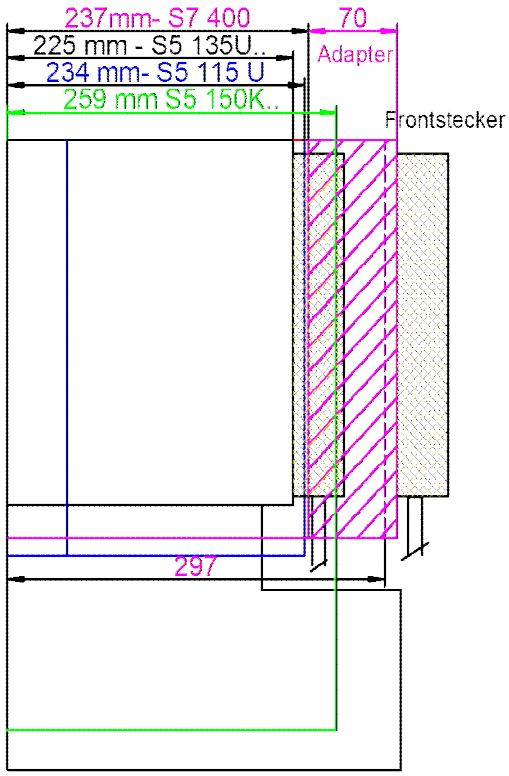
S7-rail and S7-300 are not included.

Structure with S7-400





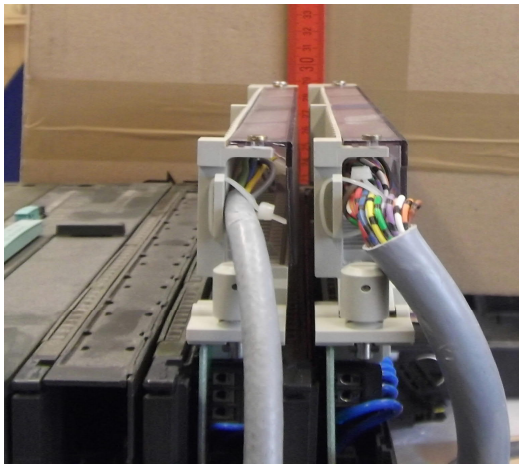
Dimensions adapter



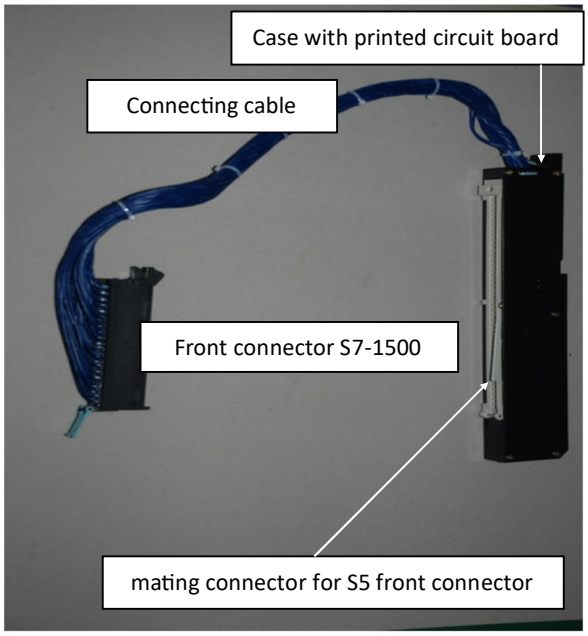
H x B x T = 290 x 25 x 70 mm

Mounting depth:

- S7 400: 237mm+70mm Adapter
- S5 150U 225mm
- S5 150K 259mm
- S5 115U 234mm



Structure with S7-1500









Technical data:

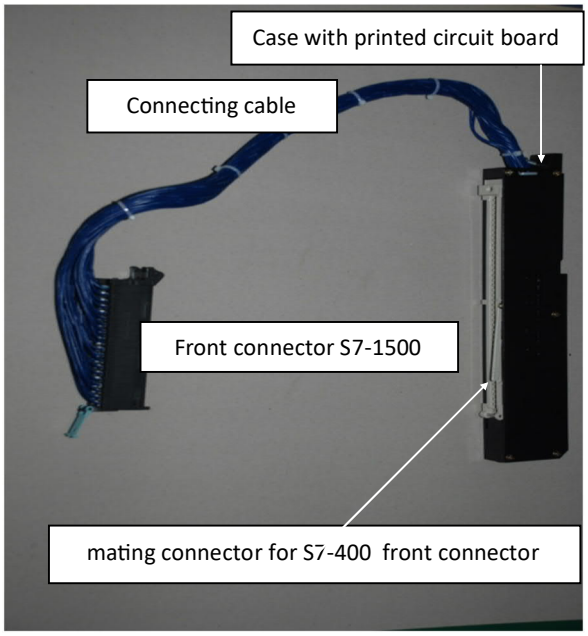
Case with printed circuit board : H x B x T = 330 x 27 x 70 mm

Connecting cable: l= 500mm

Mounting angle Set: H = 150 to 280 mm, B = 80 mm

S7-rails and S7-1500 are not included.

Structure S7-400 to S7-1500









Technical data:

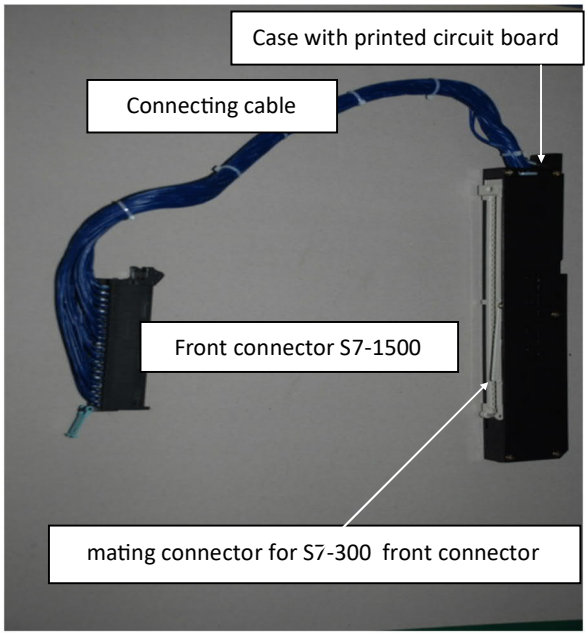
Case with printed circuit board : H x B x T = 330 x 27 x 70 mm

Connecting cable: l= 500mm

Mounting angle Set: H = 150 to 280 mm, B = 80 mm

S7-rails and S7-1500 are not included.

Structure S7-300 to S7-1500









Technical data:

Case with printed circuit board : H x B x T =

Connecting cable: l= 500mm

Mounting angle Set: H = 150 to 280 mm, B = 80 mm

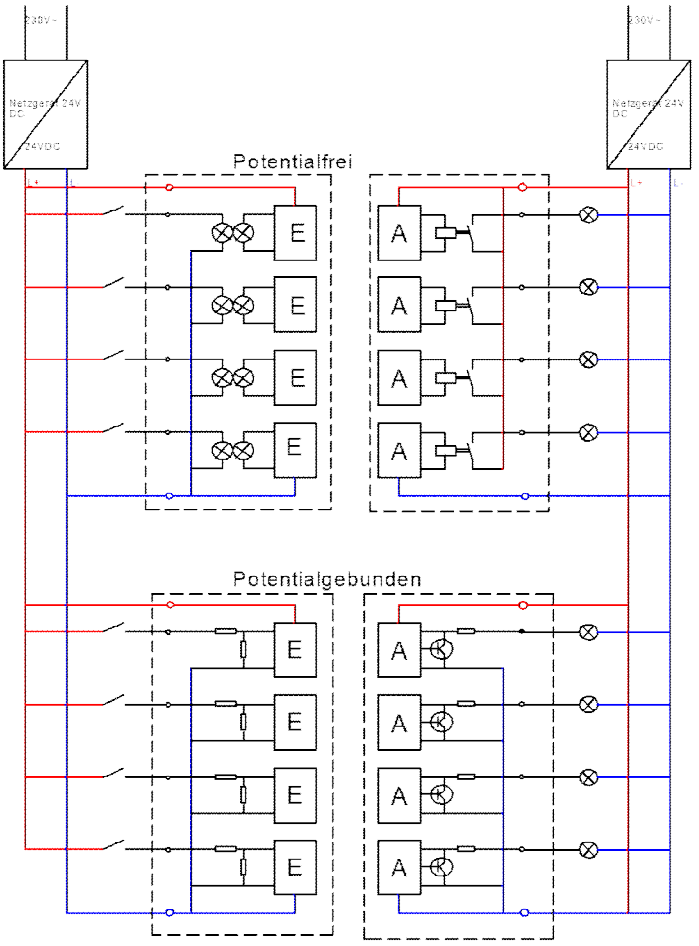
S7-rails and S7-1500 are not included.

Powersupply

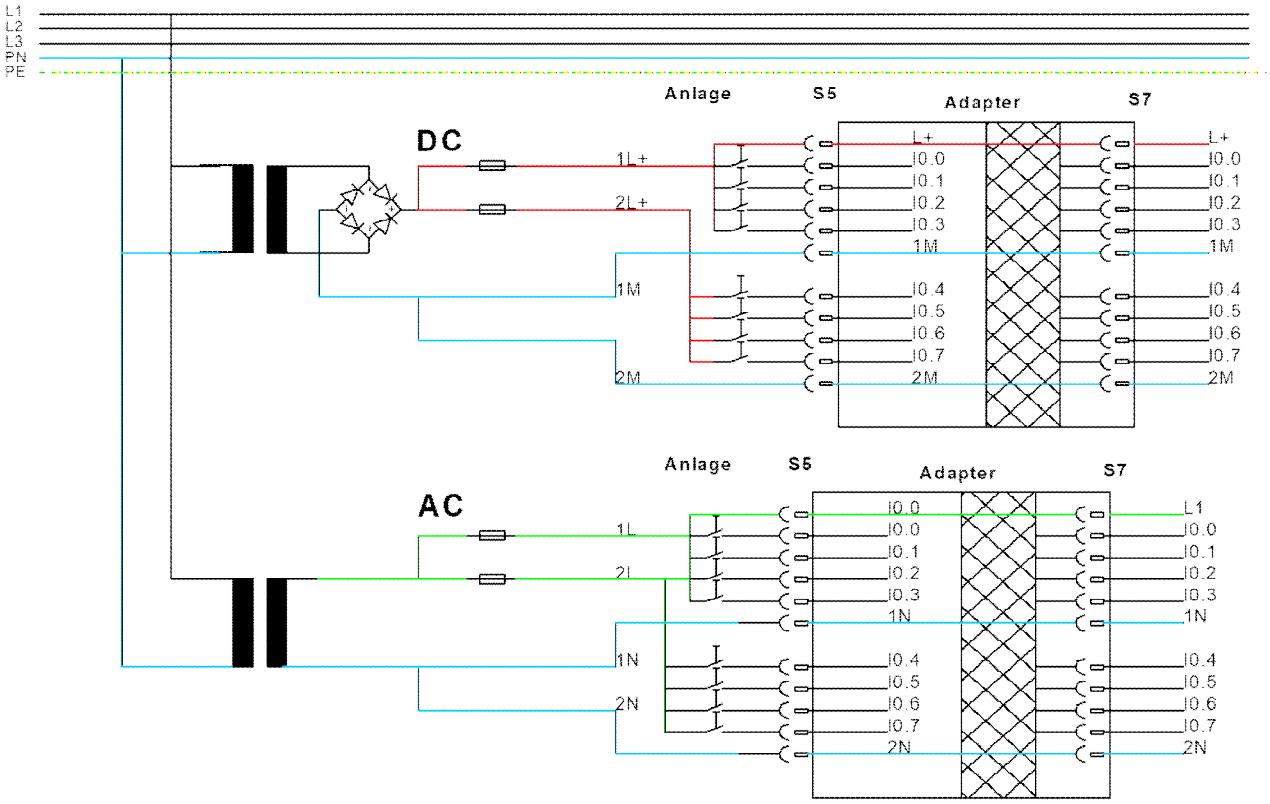
Separation of potentials

There are floating or non-floating IOs. In both cases the power for the module has to be supplied by the user.

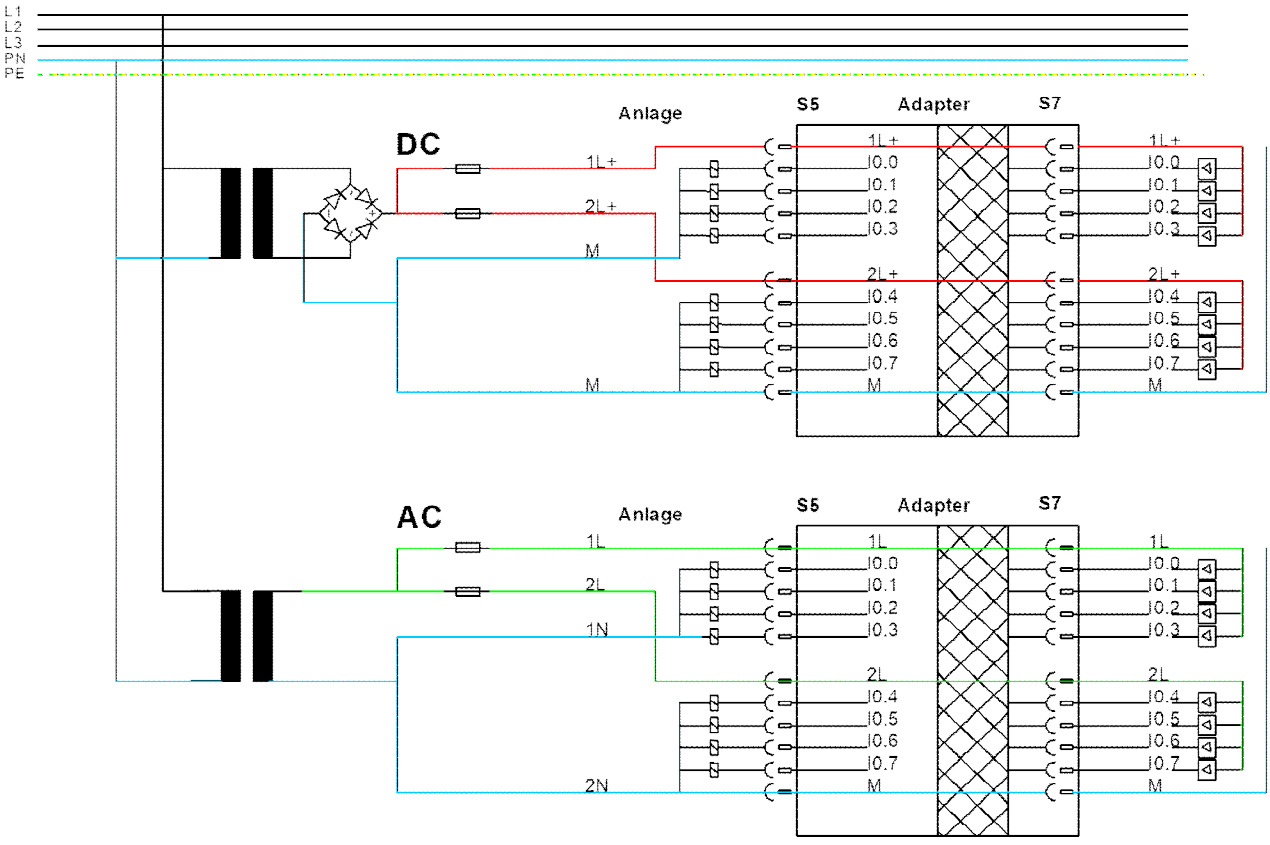
Another criterion is the short circuit protection of the signals. The outputs have to be tested for the rating of the pins and the printed conductor. Therefore the power supply of signals is rooted in groups of 1/2/4/8/16.



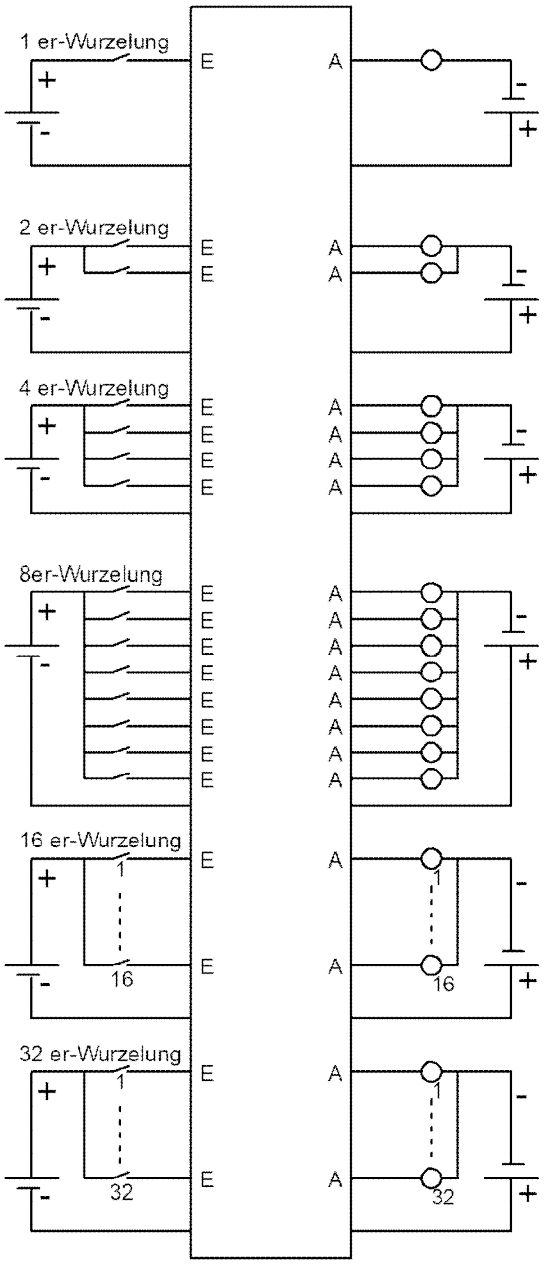
Powersupply of inputs



Powersupply of inputs



Rooting


1 er-Wurzelung
2 er-Wurzelung
4 er-Wurzelung
8er-Wurzelung
16 er-Wurzelung
32 er-Wurzelung
E
A
+
-
1
16
32

Conditions of Sale

The Interface Module Adapters 6EZ2 041-8UG.. are intended to be used between the front-plugs on the I-O-modules of an obsolete controller and a modern replacement controller SIMATIC S7. Hereby all installation remains at its place; only the controller and the respective software have to be substituted.

For the substitution of the up-to-now-used units the best matching units of S7- components were selected. However there remains a certain deviation in the specific performance. It is up to the user to check the limitations of his own installation, in particular the:

- Power supply
- Signal voltage
- Line-frequency
- Limits of I-O-definitions
- Rooting
- Number of channels
- Loading capacity
- Rating of connectors
- Signal switching frequency

If the S7-units do require an external application of +/- potentials and the old installation did not supply them, these potentials have to be brought to the terminal block on the adapter or to the S5 front connector .

If the power-rooting of the old installation is not corresponding to the new requirements, the user has to install the additional jumpers.

If the old installation was fed from different power sources, an equipotential bonding contactor has to be applied.

The enable –signal of the S5 units is not present in the S7-system in an identical way and may be considered on handling.

The parametering and selection of modes in the I/O units has to be done according to the requirements of the S7.

The vendor is not liable for damages that are caused by improper use of the Interface Module Adapters.

It is recommended to perform a field-test before the general switch-over of the new installation.

S5 module	I/O	Voltage	Current	Adapter	S7 module
6ES5 420-7LA11	32 DI	24 VDC		6EZ2041-8UG02-0DE0	6ES7 321-1BL00-0AA0
6ES5 430-7LA12	32 DI	24 VDC		6EZ2041-8UG02-0DE0	6ES7 321-1BL00-0AA0
6ES5 431-7LA11	16 DI	24/48 VUC		6EZ2041-8UG02-0DE1	6ES7 321-1CH00-0AA0
6ES5 432-7LA11	16 DI	48-60 VUC		6EZ2041-8UG02-0DE1	6ES7 321-1CH00-0AA0
6ES5 434-7LA12	8 DI	24 VDC		6EZ2041-8UG02-0DE2	6ES7 321-1CH00-0AA0
6ES5 435-7LA11	16 DI	115 VUC		6EZ2041-8UG02-0DE3	6ES7 321-1FH00-0AA0
6ES5 435-7LB11	16 DI	115 VUC		6EZ2041-8UG02-0DE4	6ES7 321-1FF01-0AA0
6ES5 435-7LC11	8 DI	115 VUC		6EZ2041-8UG02-0DE5	6ES7 321-1FF10-0AA0
6ES5 436-7LA11	16 DI	230 VUC		6EZ2041-8UG02-0DE3	6ES7 321-1FH00-0AA0
6ES5 436-7LB11	16 DI	230 VUC		6EZ2041-8UG02-0DE4	6ES7 321-1FF01-0AA0
6ES5 436-7LC11	8 DI	230 VUC		6EZ2041-8UG02-0DE5	6ES7 321-1FF10-0AA0
6ES5 441-7LA13	32 DO	24 VDC	0,5 A	6EZ2041-8UG02-0DA0	6ES7 322-1BL00-0AA0
6ES5 451-7LA12	32 DO	24 VDC	0,5 A	6EZ2041-8UG02-0DA0	6ES7 322-1BL00-0AA0
6ES5 451-7LA21	32 DO	24 VDC	0,5 A	6EZ2041-8UG02-0DA0	6ES7 322-1BL00-0AA0
6ES5 453-7LA11	16 DO	24-60 VDC	0,5 A	6EZ2041-8UG02-0DA1	6ES7 322-5GH00-0AB0
6ES5 454-7LA12	16 DO	24 VDC	2A	6EZ2041-8UG02-0DA2	6ES7 322-1BF01-0AA0
6ES5 456-7LA11	16 DO	115/230 VAC	1A	6EZ2041-8UG02-0DA5	6ES7 322-1FF01-0AA0
6ES5 456-7LB11	8 DO	115/230 VAC	2A	6EZ2041-8UG02-0DA6	6ES7 322-5FF00-0AB0
6ES5 456-7LB11	8 DO	115/230 VAC		6EZ2041-8UG02-1DA6	6ES7 322-1HF10-0AA0
6ES5 458-7LA12	16 DO	Rel	0,5 A	6EZ2041-8UG02-0DA7	6ES7 322-5HF00-0AB0
6ES5 458-7LB11	8 DO	Rel		6EZ2041-8UG02-0DA8	6ES7 322-5HF00-0AB0
6ES5 458-7LC11	16 DO	Rel	5 A	6EZ2041-8UG02-0DA9	6ES7 322-5HF00-0AB0
6ES5 482-7LA11	16DE/16DA	24 VDC		6EZ2041-8UG02-0EA0	6ES7 323-1BL00-0AA0
6ES5 460-7LA13	8 AE	current and voltage metering		6EZ2041-8UG02-0AE1	6ES7 331-7KF02-0AB0
6ES5 460-7LA13	8 AE	only current metering		6EZ2041-8UG02-1AE1	6ES7 331-7NF00-0AB0
6ES5 460-7LA13	8 AE	only voltage metering		6EZ2041-8UG02-2AE1	6ES7 331-7NF00-0AB0
6ES5 465-7LA13	16 AE	current and voltage metering		6EZ2041-8UG02-0AE2	6ES7 331-7KF02-0AB0
6ES5 465-7LA13	8 AE	only PT100		6EZ2041-8UG02-1AE2	6ES7 331-7PF01-0AB0
6ES5 465-7LA13	8 AE	only PT100		6EZ2041-8UG02-2AE2	6ES7 331-1KF01-0AB0
6ES5 470-7LA13	8 AA	current and voltage output		6EZ2041-8UG02-0AA0	6ES7 332-5HD01-0AB0
6ES5 470-7LA13	8 AA	current and voltage output		6EZ2041-8UG02-1AA0	6ES7 332-5HF00-0AB0
6ES5 470-7LB13	8 AA	only voltage output		6EZ2041-8UG02-0AA0	6ES7 332-5HD01-0AB0
6ES5 470-7LB13	8 AA	only voltage output		6EZ2041-8UG02-1AA0	6ES7 332-5HF00-0AB0
6ES5 470-7LC13	8 AA	current and voltage output		6EZ2041-8UG02-0AA0	6ES7 332-5HD01-0AB0

S5 module	I/O	Voltage	Current	Adapter	S7 module
6ES5 470-7LC13	8 AA	current and voltage output		6EZ2041-8UG02-1AA0	6ES7 332-5HF00-0AB0
				6EZ2041-8UG02-0DU0	open ended
				6EZ2041-8UG02-0DU1	terminal adapter
Accessories				6EZ2041-8UG00-0BG0	Mounting angle (2 pieces)

max. allowable 48V

switched on 2 S7-modules

only 16DI/DO

only AC and switched on 2 S7-modules

M must be wired

N must be wired and switched on 2 S7-modules

only AC in-phase

S5 module	I/O	Voltage	Current	Adapter	S7 module
6ES5 420-7LA11	32 DI	24 VDC		6EZ2041-8UG05-0EU36	6ES7 421-1BL01-0AA0
6ES5 430-7LA12	32 DI	24 VDC		6EZ2041-8UG05-0EU36	6ES7 421-1BL01-0AA0
6ES5 431-7LA11	16 DI	24/48 VUC		6EZ2041-8UG65-0EU22	6ES7 421-7DH00-0AB0
6ES5 432-7LA11	16 DI	48-60 VUC		6EZ2041-8UG65-0EU22	6ES7 421-7DH00-0AB0
6ES5 434-7LA12	8 DI	24 VDC		6EZ2041-8UG05-0EU10	6ES7 421-7DH00-0AB0
6ES5 435-7LA11	16 DI	115 VUC		6EZ2041-8UG55-0EU22	6ES7 421-1FH20-0AA0
6ES5 435-7LB11	16 DI	115 VUC		6EZ2041-8UG55-0EU21	6ES7 421-1FH20-0AA0
6ES5 435-7LC11	8 DI	115 VUC		6EZ2041-8UG55-0EU10	6ES7 421-1FH20-0AA0
6ES5 436-7LA11	16 DI	230 VUC		6EZ2041-8UG55-0EU22	6ES7 421-1FH20-0AA0
6ES5 436-7LB11	16 DI	230 VUC		6EZ2041-8UG55-0EU21	6ES7 421-1FH20-0AA0
6ES5 436-7LC11	8 DI	230 VUC		6EZ2041-8UG55-0EU10	6ES7 421-1FH20-0AA0
6ES5 441-7LA13	32 DO	24 VDC	0,5 A	6EZ2041-8UG05-0AU33	6ES7 422-1BL00-0AA0
6ES5 451-7LA12	32 DO	24 VDC	0,5 A	6EZ2041-8UG05-0AU33	6ES7 422-1BL00-0AA0
6ES5 451-7LA21	32 DO	24 VDC	0,5 A	6EZ2041-8UG05-0AU33	6ES7 422-1BL00-0AA0
6ES5 454-7LA12	16 DO	24 VDC	2A	6EZ2041-8UG05-0AU22	6ES7 422-1BH11-0AA0
6ES5 455-7LA11	16 DO	115 VAC	2A	6EZ2041-8UG45-0AU21	6ES7 422-1HH00-0AA0
6ES5 456-7LA11	16 DO	230 VAC	1A	6EZ2041-8UG55-0AU22	6ES7 422-1FH00-0AA0
6ES5 458-7LC11	16 DO	Rel	5A	6EZ2041-8UG65-0AU22	6ES7 422-1HH00-0AA0
6ES5 460-7LA13	8 AE	only current metering		6EZ2041-8UG75-0EU11	6ES7 431-1KF00-0AB0
6ES5 460-7LA13	8 AE	only voltage metering		6EZ2041-8UG75-0EU12	6ES7 431-1KF00-0AB0
6ES5 465-7LA13	8 AE	only PT100		6EZ2041-8UG75-0EU20	6ES7 431-7KF10-0AB0
6ES5 465-7LA13	8 AE	current and voltage metering		6EZ2041-8UG75-0EU21	6ES7 431-7QH00-0AB0
6ES5 465-7LA13	8 AE	current and voltage metering		6EZ2041-8UG75-0EU21	6ES7 431-0HH00-0AB0
6ES5 470-7LA13	8 AA	current and voltage outout		6EZ2041-8UG75-0AU11	6ES7 432-1HF00-0AB0
6ES5 470-7LB13	8 AA	only voltage output		6EZ2041-8UG75-0AU11	6ES7 432-1HF00-0AB0
6ES5 470-7LC13	8 AA	current and voltage outout		6EZ2041-8UG75-0AU11	6ES7 432-1HF00-0AB0

Attention: Front connector with double width needs more place!

S5 module	I/O	Voltage	Current	Adapter	S7 module
6ES5 420-4UA14	32 DI	24 VDC		6EZ2041-8UG01-0DE0	6ES7 321-1BL00-0AA0
6ES5 430-4UA14	32 DI	24 VDC		6EZ2041-8UG01-0DE0	6ES7 321-1BL00-0AA0
6ES5 431-4UA12	16 DI	24/60 VDC		6EZ2041-8UG01-0DE1	6ES7 321-1CH00-0AA0
6ES5 432-4UA12	32DI	24 VDC		6EZ2041-8UG01-0DE2	6ES7 321-1BL00-0AA0
6ES5 434-4UA12	32DI Namur	24 VDC		6EZ2041-8UG01-0DE6	6ES7 321-7TH00-0AB0
6ES5 435-4UA12	16 DI	24/60 VDC		6EZ2041-8UG01-0DE3	6ES7 321-1CH00-0AA0
6ES5 436-4UA12	16 DI	115/230 VAC		6EZ2041-8UG01-0DE4	6ES7 321-1FH00-0AA0
6ES5 436-4UB12	8 DI	115/230 VAC		6EZ2041-8UG01-0DE5	6ES7 321-1FF10-0AA0
6ES5 441-4UA14	32 DO	24 VDC	0,5 A	6EZ2041-8UG01-0DA0	6ES7 322-1BL00-0AA0
6ES5 451-4UA14	32 DO	24 VDC	0,5 A	6EZ2041-8UG01-0DA0	6ES7 322-1BL00-0AA0
6ES5 453-4UA12	16DO	24VDC	2A	6EZ2041-8UG01-0DA7	6ES7 322-1BF01-0AA0
6ES5 453-4UA12	16DO	24VDC	0,5 A	6EZ2041-8UG01-0DA1	6ES7 322-5GH00-0AB0
6ES5 454-4UA14	16 DO	24 VDC	2A	6EZ2041-8UG01-0DA2	6ES7 322-1BF01-0AA0
6ES5 456-4UA12	16 DO	115/230 VAC	2 A	6EZ2041-8UG01-0DA3	6ES7 322-1FF01-0AA0
6ES5 456-4UB12	8 DO	115/230 VAC	2 A	6EZ2041-8UG01-0DA4	6ES7 322-5FF00-0AB0
6ES5 457-4UA12	16 DO	max. 24VDC	0,5A	6EZ2041-8UG01-1DA6	6ES7 322-1BL00-0AA0
6ES5 458-4UC11	16 DO	Relais	5 A	6EZ2041-8UG01-0DA5	6ES7 322-1HH01-0AA0
6ES5 458-4UA12	16 DO	60 VDC/ 48V AC	0,5 A	6EZ2041-8UG01-0DA6	6ES7322-5HF00-0AB0
6ES5 482-4UA11	16DI/16DO	24 VDC	0,5 A	6EZ2041-8UG01-0EA0	6ES7 323-1BL00-0AA0
6ES5 482-4UA20	16DI/16DO	24 VDC	0,5 A	6EZ2041-8UG01-0EA0	6ES7 323-1BL00-0AA0
6ES5 460-4UA13	8 AI	current and voltage metering		6EZ2041-8UG01-0AE0	6ES7 331-7KF02-0AB0
6ES5 460-4UA13	8 AI	only PT100		6EZ2041-8UG01-1AE0	6ES7 331-7PF01-0AB0
6ES5 460-4UA13	8 AI	only current metering		6EZ2041-8UG01-2AE0	6ES7 331-7NF00-0AB0
6ES5 460-4UA13	8 AI	only voltage metering		6EZ2041-8UG01-3AE0	6ES7 331-7NF00-0AB0
6ES5 465-4UA13	16 AI	current and voltage metering		6EZ2041-8UG01-0AE2	6ES7 331-7KF02-0AB0
6ES5 465-4UA13	8 AI	only PT100		6EZ2041-8UG01-1AE2	6ES7 331-7PF01-0AB0
6ES5 465-4UA13	8 AI	only PT100		6EZ2041-8UG01-2AE2	6ES7 331-1KF01-0AB0
6ES5 470-4UA13	8 AO	current and voltage outout		6EZ2041-8UG01-0AA0	6ES7 332-5HD01-0AB0
6ES5 470-4UA13	8 AO	current and voltage outout		6EZ2041-8UG01-1AA0	6ES7 332-5HF00-0AB0
6ES5 470-4UB13	8 AO	only voltage output		6EZ2041-8UG01-0AA0	6ES7 332-5HD01-0AB0
6ES5 470-4UC13	8 AO	only voltage output		6EZ2041-8UG01-1AA0	6ES7 332-5HF00-0AB0

S5 module	I/O	Voltage	Current	Adapter	S7 module
6ES5 470-4UC13	8 AO	current and voltage outout		6EZ2041-8UG01-0AA0	6ES7 332-5HD01-0AB0
				6EZ2041-8UG01-0DU1	Klemmenadapter
				6EZ2041-8UG01-0DU0	open ended
Accessories				6EZ2041-8UG00-0BG0	Mounting angle (2 pieces)

max. allowable 48V	M must be wired
switched on 2 S7-modules	N must be wired and switched on 2 S7-modules
only 16DI/DO	
only AC and switched on 2 S7-modules	

S5 module	I/O	Voltage	Current	Adapter	S7 module
6ES5 420-4UA14	32 DI	24 VDC		6EZ2041-8UG07-0EU36	6ES7 421-1BL01-0AA0
6ES5 430-4UA14	32 DI	24 VDC		6EZ2041-8UG07-0EU36	6ES7 421-1BL01-0AA0
6ES5 431-4UA12	16 DI	24/60 VDC		6EZ2041-8UG07-0EU20	6ES7 421-7DH00-0AB0
6ES5 432-4UA12	32DI	24 VDC		6EZ2041-8UG07-0EU33	6ES7 421-1BL01-0AA0
6ES5 436-4UA12	16 DI	115/230 VAC		6EZ2041-8UG57-1EU23	6ES7 421-1FH20-0AA0
6ES5 436-4UB12	8 DI	115/230 VAC		6EZ2041-8UG57-1EU20	6ES7 421-1FH20-0AA0
6ES5 441-4UA14	32 DO	24 VDC	0,5 A	6EZ2041-8UG07-0AU36	6ES7 422-1BL00-0AA0
6ES5 441-4UA14	32 DO	24 VDC	0,5 A	6EZ2041-8UG07-0AU37	6ES7 422-7BL00-0AB0
6ES5 451-4UA14	32 DO	24 VDC	0,5 A	6EZ2041-8UG07-0AU37	6ES7 422-7BL00-0AB0
6ES5 451-4UA14	32 DO	24 VDC	0,5 A	6EZ2041-8UG07-0AU36	6ES7 422-1BL00-0AA0
6ES5 454-4UA14	16 DO	24 VDC	2 A	6EZ2041-8UG07-1AU23	6ES7 422-1BH11-0AA0
6ES5 456-4UA12	16 DO	115/230 VAC	2 A	6EZ2041-8UG57-1AU23	6ES7 422-1FH00-0AA0
6ES5 458-4UC11	16 DO	Relais	5 A	6EZ2041-8UG67-0AU23	6ES7 422-1HH00-0AA0
6ES5 460-4UA13	8 AI	only current metering		6EZ2041-8UG77-0EU11	6ES7 431-1KF00-0AB0
6ES5 460-4UA13	8 AI	only voltage metering		6EZ2041-8UG77-0EU12	6ES7 431-1KF00-0AB0
6ES5 465-4UA13	8 AI	only PT100		6EZ2041-8UG77-0EU20	6ES7 431-7KF10-0AB0
6ES5 465-4UA13	16 AI	current and voltage metering		6EZ2041-8UG77-0EU21	6ES7 431-0HH00-0AB0
6ES5 465-4UA13	16 AI	current and voltage metering		6EZ2041-8UG77-0EU21	6ES7 431-7QH00-0AB0
6ES5 470-4UA13	8 AO	only current output		6EZ2041-8UG77-0AU11	6ES7 432-1HF00-0AB0
6ES5 470-4UC13	8 AO	only current output		6EZ2041-8UG77-0AU11	6ES7 432-1HF00-0AB0
6ES5 470-4UA13	8 AO	only voltage output		6EZ2041-8UG77-0AU12	6ES7 432-1HF00-0AB0
6ES5 470-4UB13	8 AO	only voltage output		6EZ2041-8UG77-0AU12	6ES7 432-1HF00-0AB0
6ES5 470-4UC13	8 AO	only voltage output		6EZ2041-8UG77-0AU12	6ES7 432-1HF00-0AB0

Attention: Front connector with double width needs more place!

S5 module	I/O	Voltage	Current	Adapter	S7 module
6ES5 420-3BA11	32 DI	24 VDC		6EZ2041-8UG03-0DE0	6ES7 321-1BL00-0AA0
6ES5 430-3BA11	32 DI	24 VDC		6EZ2041-8UG03-0DE0	6ES7 321-1BL00-0AA0
6ES5 431-3BA11	16 DI	24-60 VDC		6EZ2041-8UG03-0DE1	6ES7 321-1CH00-0AA0
6ES5 442-3AA11	32 DO	24 VDC	10 mA	6EZ2041-8UG03-0DA0	6ES7 322-1BL00-0AA0
6ES5 444-3AA11	16 DO	24 VDC	2 A	6EZ2041-8UG03-0DA1	6ES7 322-1BF01-0AA0
6ES5 445-3AA12	32 DO	24 VDC	0,5 A	6EZ2041-8UG03-0DA2	6ES7 322-1BL00-0AA0
6ES5 450-3AA11	32 DO	24-60 VDC	0,12 A	6EZ2041-8UG03-0DA2	6ES7 322-1BL00-0AA0
6ES5 451-3AA11	16 DO	24 VDC	0,5 A	6EZ2041-8UG03-0DA3	6ES7 322-1BH01-0AA0

Accessories				6EZ2041-8UG00-0BG0	Mounting angle (2 pieces)

max. allowable 48V

N must be wired and switched on 2 S7-modules

M must be wired

Info:
There is only a remaining stock.
Adapter 6EZ2041-8UG03-xxxx only available on request

S5 module	I/O	Voltage	Current	Adapter	S7 module
6ES5 420-3BA11	32 DI	24 VDC		6EZ2041-8UG08-0DE0	6ES7 421-1BL01-0AA0
6ES5 430-3BA11	32 DI	24 VDC		6EZ2041-8UG08-0DE0	6ES7 421-1BL01-0AA0
6ES5 431-3BA11	16 DI	24-60 VDC		6EZ2041-8UG08-0DE1	6ES7 421-7DH00-0AA0
6ES5 442-3AA11	32 DO	24 VDC	10 mA	6EZ2041-8UG08-0DA1	6ES7 422-1BL00-0AA0
6ES5 444-3AA11	16 DO	24 VDC	2 A	6EZ2041-8UG08-0DA2	6ES7 422-1BH11-0AA0
6ES5 445-3AA12	32 DO	24 VDC	0,5 A	6EZ2041-8UG08-0DA0	6ES7 422-1BL00-0AA0
6ES5 450-3AA11	32 DO	24-60 VDC	0,12 A	6EZ2041-8UG08-0DA0	6ES7 422-1BL00-0AA0
6ES5 451-3AA11	16 DO	24 VDC	0,5 A	6EZ2041-8UG08-0DA3	6ES7 422-1BH11-0AA0

M must be wired

Info:
There is only a remaining stock.
Adapter 6EZ2041-8UG08-xxxx only available on request

S5 module	I/O	Voltage	Current	Adapter	S7 module
6ES5 420-4UA14	32 DI	24 VDC		6EZ2041-8UG11-0DE0	6ES7 521-1BL00-0AB0
6ES5 430-4UA14	32 DI	24 VDC		6EZ2041-8UG11-0DE0	6ES7 521-1BL00-0AB0
6ES5 431-4UA12	16 DI	24/60 VDC		6EZ2041-8UG11-0DE1	6ES7 521-1BH00-0AB0
6ES5 432-4UA12	32DI	24 VDC		6EZ2041-8UG11-0DE2	6ES7 521-1BL00-0AB0
6ES5 436-4UA12	16 DI	115/230 VAC		6EZ2041-8UG11-0DE4	6ES7 521-1FH00-0AA0
6ES5 436-4UB12	8 DI	115/230 VAC		6EZ2041-8UG11-0DE5	6ES7 521-1FH00-0AA0
6ES5 441-4UA14	32 DO	24 VDC	0,5 A	6EZ2041-8UG11-0DA0	6ES7 522-1BL00-0AB0
6ES5 451-4UA14	32 DO	24 VDC	0,5 A	6EZ2041-8UG11-0DA0	6ES7 522-1BL00-0AB0
6ES5 453-4UA12	16 DO	20-30 VDC	0,5A	6EZ2041-8UG11-0DA6	6ES7 522-1BF00-0AB0
6ES5 454-4UA14	16 DO	24 VDC	2 A	6EZ2041-8UG11-0DA1	6ES7 522-1BH00-0AB0
6ES5 454-4UA14	16 DO	24 VDC	2 A	6EZ2041-8UG11-0DA2	6ES7 522-1BF00-0AB0
6ES5 456-4UA12	16 DO	115/230 VAC	2 A	6EZ2041-8UG11-0DA3	6ES7 522-5FF00-0AB0
6ES5 456-4UA12	16 DO	115/230 VAC	2 A	6EZ2041-8UG11-0DA4	6ES7 522-5HF00-0AB0
6ES5 456-4UB12	8 DO	115/230 VAC	2 A	6EZ2041-8UG11-1DA3	6ES7 522-5FF00-0AB0
6ES5 456-4UA12	16 DO	115/230 VAC	2 A	6EZ2041-8UG11-1DA4	6ES7 522-5HF00-0AB0
6ES5 458-4UC11	16 DO	Relais	5 A	6EZ2041-8UG11-2DA4	6ES7 522-5HF00-0AB0
6ES5 458-4UC11	16 DO	Relais	5 A	6EZ2041-8UG11-0DA5	6ES7 522-5HH00-0AB0
6ES5 460-4UA13	8 AI	voltage metering / PT100		6EZ2041-8UG11-0AE0	6ES7 531-7KF00-0AB0
6ES5 460-4UA13	8 AI	voltage metering / PT100		6EZ2041-8UG11-0AE0	6ES7 531-7NF10-0AB0
6ES5 460-4UA13	8 AI	current- metering 2-wire-transducer		6EZ2041-8UG11-2AE0	6ES7 531-7KF00-0AB0
6ES5 460-4UA13	8 AI	current- metering 2-wire-transducer		6EZ2041-8UG11-2AE0	6ES7 531-7NF10-0AB0
6ES5 460-4UA13	8 AI	current- metering 4-wire-transducer		6EZ2041-8UG11-3AE0	6ES7 531-7KF00-0AB0
6ES5 460-4UA13	8 AI	current- metering 4-wire-transducer		6EZ2041-8UG11-3AE0	6ES7 531-7NF10-0AB0
6ES5 465-4UA13	16 AI	voltage metering		6EZ2041-8UG11-0AE2	6ES7 531-7KF00-0AB0
6ES5 465-4UA13	16 AI	voltage metering		6EZ2041-8UG11-0AE2	6ES7 531-7NF10-0AB0
6ES5 465-4UA13	16 AI	current- metering 2-wire-transducer		6EZ2041-8UG11-1AE2	6ES7 531-7KF00-0AB0
6ES5 465-4UA13	16 AI	current- metering 2-wire-transducer		6EZ2041-8UG11-1AE2	6ES7 531-7NF10-0AB0
6ES5 465-4UA13	16 AI	current- metering 4-wire-transducer		6EZ2041-8UG11-2AE2	6ES7 531-7KF00-0AB0
6ES5 465-4UA13	16 AI	current- metering 4-wire-transducer		6EZ2041-8UG11-2AE2	6ES7 531-7NF10-0AB0
6ES5 465-4UA13	16 AI	PT100 measuringmodule 6ES5498-1AA11		6EZ2041-8UG11-3AE2	6ES7 531-7KF00-0AB0
6ES5 470-4UA13	8 AO	current-- / voltage metering		6EZ2041-8UG11-0AA0	6ES7 532-5HD00-0AB0
6ES5 470-4UB13	8 AO	current- / voltage metering		6EZ2041-8UG11-0AA0	6ES7 532-5HD00-0AB0
6ES5 470-4UC13	8 AO	current- / voltage metering		6EZ2041-8UG11-0AA0	6ES7 532-5HD00-0AB0

S5 module	I/O	Voltage	Current	Adapter	S7 module
6ES5 470-4UA13	8 AO	current- / voltage metering		6EZ2041-8UG11-1AA0	6ES7 532-5HF00-0AB0
6ES5 470-4UB13	8 AO	current- / voltage metering		6EZ2041-8UG11-1AA0	6ES7 532-5HF00-0AB0
6ES5 470-4UC13	8 AO	current- / voltage metering		6EZ2041-8UG11-1AA0	6ES7 532-5HF00-0AB0
width of module 25mm					
6ES5 420-4UA14	32 DI	24 VDC		6EZ2041-8UG21-0DE0	6ES7 521-1BL10-0AA0
6ES5 430-4UA14	32 DI	24 VDC		6EZ2041-8UG21-0DE0	6ES7 521-1BL10-0AA0
6ES5 431-4UA12	16 DI	24-60VDC		6EZ2041-8UG21-0DE1	6ES7 521-1BH10-0AA0
6ES5 431-4UA12	16 DI	24-60VDC		6EZ2041-8UG21-1DE1 ground is bridged	6ES7 521-1BH10-0AA0
6ES5 432-4UA12	32 DI	24VDC		6EZ2041-8UG21-0DE2	6ES7 521-1BL10-0AA0
6ES5 432-4UA12	32 DI	24V		6EZ2041-8UG21-1DE2	6ES7 521-1BL10-0AA0
6ES5 441-4UA14	32 DO	24 VDC	0,5A	6EZ2041-8UG21-0DA0	6ES7 522-1BL10-0AA0
6ES5 451-4UA14	32 DO	24 VDC	0,5A	6EZ2041-8UG21-0DA0	6ES7 522-1BL10-0AA0
6ES5 482-4UA11	16DI/16DO	24 VDC	0,5A	6EZ2041-8UG21-0EA0	6ES7 523-1BL00-0AA0
6ES5 460-4UA13	8 AI	voltage metering		6EZ2041-8UG21-0AE0	6ES7 531-7QD00-0AB0
6ES5 460-4UA13	8 AI	current metering / 4-wire-transducer		6EZ2041-8UG21-0AE1	6ES7 531-7QD00-0AB0
6ES5 460-4UA13	8 AI	current- metering 2-wire-transducer		6EZ2041-8UG21-0AE2	6ES7 531-7QD00-0AB0
				6EZ2041-8UG01-0DU1	terminal adapter
				6EZ2041-8UG01-0DU0	open ended
Accessories				6EZ2041-8UG00-0BG0	mounting angle (2 pieces)

switched on 2 S7-1500 modules 0.5A

switched on 2 S7-1500 modules

max. 24 VDC

observe technical data

S5 module	I/O	Voltage	Current	Adapter	S7 module
6ES5 420-7LA11	32 DI	24 VDC		6EZ2041-8UG12-0DE0	6ES7 521-1BL00-0AB0
6ES5 430-7LA12	32 DI	24 VDC		6EZ2041-8UG12-0DE0	6ES7 521-1BL00-0AB0
6ES5 431-7LA11	16 DI	24/48 VUC		6EZ2041-8UG12-0DE1	6ES7 521-1BH00-0AB0
6ES5 434-7LA12	8 DI	24 VDC		6EZ2041-8UG12-0DE2	6ES7 521-1BH00-0AB0
6ES5 435-7LA11	16 DI	115 VUC		6EZ2041-8UG12-0DE3	6ES7 521-1FH00-0AA0
6ES5 435-7LB11	16 DI	115 VUC		6EZ2041-8UG12-0DE4	6ES7 521-1FH00-0AA0
6ES5 436-7LA11	16 DI	230 VUC		6EZ2041-8UG12-0DE3	6ES7 521-1FH00-0AA0
6ES5 436-7LB11	16 DI	230 VUC		6EZ2041-8UG12-0DE4	6ES7 521-1FH00-0AA0
6ES5 441-7LA13	32 DO	24 VDC	0,5 A	6EZ2041-8UG12-0DA0	6ES7 522-1BL01-0AB0
6ES5 451-7LA12	32 DO	24 VDC	0,5 A	6EZ2041-8UG12-0DA0	6ES7 522-1BL01-0AB0
6ES5 451-7LA21	32 DO	24 VDC	0,5 A	6EZ2041-8UG12-0DA0	6ES7 522-1BL01-0AB0
6ES5 453-7LA11	16 DO	24-60 VDC	0,5 A	6EZ2041-8UG12-0DA1	6ES7 522-1BH00-0AB0
6ES5 454-7LA12	16 DO	24 VDC	2A	6EZ2041-8UG12-1DA1	6ES7 522-1BH00-0AB0
6ES5 454-7LA12	16 DO	24 VDC	2A	6EZ2041-8UG12-1DA2	6ES7 522-1BF00-0AB0
6ES5 454-7LB11	8 DO	24 VDC	2A	6EZ2041-8UG12-0DA2	6ES7 522-1BF00-0AB0
6ES5 456-7LA11	16 DO	115/230 VAC	1A	6EZ2041-8UG12-0DA3	6ES7 522-5FF00-0AB0
6ES5 456-7LA11	16 DO	115/230 VAC	1A	6EZ2041-8UG12-0DA4	6ES7 522-5HF00-0AB0
6ES5 456-7LA11	16 DO	115/230 VAC	1A	6EZ2041-8UG12-0DA5	6ES7 522-5FH00-0AB0
6ES5 456-7LB11	8 DO	115/230 VAC	1,5A	6EZ2041-8UG12-1DA3	6ES7 522-5FF00-0AB0
6ES5 456-7LB11	8 DO	115/230 VAC	1,5 A	6EZ2041-8UG12-1DA4	6ES7 522-5HF00-0AB0
6ES5 458-7LA12	16 DO	Rel. UC 30V	0,5 A	6EZ2041-8UG12-2DA4	6ES7 522-5HF00-0AB0
6ES5 458-7LB11	8 DO	Rel.AC250V	5A	6EZ2041-8UG12-3DA4	6ES7 522-5HF00-0AB0
6ES5 458-7LC11	16 DO	Rel.AC250V	5A	6EZ2041-8UG12-4DA4	6ES7 522-5HF00-0AB0
6ES5 460-7LA13	8 AI	voltage metering / PT100 / 2-wire-transducer		6EZ2041-8UG12-0AE1	6ES7 531-7KF00-0AB0
6ES5 460-7LA13	8 AI	voltage metering / PT100 / 2-wire-transducer		6EZ2041-8UG12-0AE1	6ES7 531-7NF10-0AB0
6ES5 460-7LA13	8 AI	current metering		6EZ2041-8UG12-1AE1	6ES7 531-7KF00-0AB0
6ES5 460-7LA13	8 AI	current metering		6EZ2041-8UG12-1AE1	6ES7 531-7NF10-0AB0
6ES5 460-7LA13	8 AI	current metering / 4-wire-transducer		6EZ2041-8UG12-2AE1	6ES7 531-7KF00-0AB0
6ES5 460-7LA13	8 AI	current metering / 4-wire-transducer		6EZ2041-8UG12-2AE1	6ES7 531-7NF10-0AB0

S5 module	I/O	Voltage	Current	Adapter	S7 module
6ES5 465-7LA13	16 AI	voltage metering		6EZ2041-8UG12-0AE2	6ES7 531-7KF00-0AB0
6ES5 465-7LA13	16 AI	voltage metering		6EZ2041-8UG12-0AE2	6ES7 531-7NF10-0AB0
6ES5 465-7LA13	16AI	RTD 4-wire transducer		6EZ2041-8UG12-1AE2	6ES7 531-7KF00-0AB0
6ES5 465-7LA13	16AI	RTD 4-wire Transducer		6EZ2041-8UG12-1AE2	6ES7 531-7NF10-0AB0
6ES5 465-7LA13	16 AI	current metering / 2-wire-transducer		6EZ2041-8UG12-2AE2	6ES7 531-7KF00-0AB0
6ES5 465-7LA13	16 AI	current metering / 2-wire-transducer		6EZ2041-8UG12-2AE2	6ES7 531-7NF10-0AB0
6ES5 465-7LA13	16 AI	current metering / 4-wire-transducer		6EZ2041-8UG12-3AE2	6ES7 531-7KF00-0AB0
6ES5 465-7LA13	16 AI	current metering / 4-wire-transducer		6EZ2041-8UG12-3AE2	6ES7 531-7NF10-0AB0
6ES5 470-7LA13	8 AO	Current - / voltage metering		6EZ2041-8UG12-0AA0	6ES7 532-5HD00-0AB0
6ES5 470-7LB13	8 AO	Current - / voltage metering		6EZ2041-8UG12-0AA0	6ES7 532-5HD00-0AB0
6ES5 470-7LC13	8 AO	Current - / voltage metering		6EZ2041-8UG12-0AA0	6ES7 532-5HD00-0AB0
6ES5 470-7LA13	8 AO	Current - / voltage metering		6EZ2041-8UG12-1AA0	6ES7 532-5HF00-0AB0
6ES5 470-7LB13	8 AO	Current - / voltage metering		6EZ2041-8UG12-1AA0	6ES7 532-5HF00-0AB0
6ES5 470-7LC13	8 AO	Current - / voltage metering		6EZ2041-8UG12-1AA0	6ES7 532-5HF00-0AB0
width of module 25mm					
6ES5 420-7LA11	32 DI	24 VDC		6EZ2041-8UG22-0DE0	6ES7 521-1BL10-0AB0
6ES5 430-7LA12	32 DI	24 VDC		6EZ2041-8UG22-0DE0	6ES7 521-1BL10-0AB0
6ES5 431-7LA11	16 DI	24 - 48 VUC		6EZ2041-8UG22-0DE1	6ES7 521-1BH10-0AA0
6ES5 431-7LA11	16 DI	24 - 48 VUC		6EZ2041-8UG22-1DE1 ground connected	6ES7 521-1BH10-0AA0
6ES5 441-7LA13	32 DO	24 VDC		6EZ2041-8UG22-0DA0	6ES7 522-1BL10-0AA0
6ES5 451-7LA12	32 DO	24 VDC		6EZ2041-8UG22-0DA0	6ES7 522-1BL10-0AA0
6ES5 451-7LA21	32 DO	24 VDC		6EZ2041-8UG22-0DA0	6ES7 522-1BL10-0AA0
6ES5 482-7LA11	16DI/16DO	24 VDC		6EZ2041-8UG22-0EA0	6ES7 523-1BL00-0AA0
6ES5 460-7LA13	8 AI	voltage metering		6EZ2041-8UG22-0AE0	6ES7 531-7QD00-0AB0
6ES5 460-7LA13	8 AI	current metering / 4-wire-transducer		6EZ2041-8UG22-0AE1	6ES7 531-7QD00-0AB0
6ES5 460-7LA13	8 AI	current metering / 2-wire-transducer		6EZ2041-8UG22-0AE2	6ES7 531-7QD00-0AB0
				6EZ2041-8UG02-0DU1	terminal adapter
				6EZ2041-8UG02-0DU0	open ended
Accessories				6EZ2041-8UG00-0BG0	mounting angle (2 pieces)

switched on 2 S7-1500 modules

S7-1500 module with 0,5A

observe technical data of S7-modules

S7-1500 module with 24VDC

S7-300	I/O	Voltage	Current	Adapter	S7-1500
6ES7 321-1BL01-0AA0	32 DI	24 VDC		6EZ2041-8HR11-0DE0	6ES7 521-1BL00-0AB0
6ES7 321-1BH01-0AA0	16 DI	24VDC		6EZ2041-8HR11-2DE0	6ES7 521-1BH00-0AB0
6ES7 322-1BL00-0AA0	32 DO	24 VDC	0,5A	6EZ2041-8HR11-0DA0	6ES7 522-1BL01-0AA0
6ES7 322-1BH01-0AA0	16DO	24 VDC	0,5A	6EZ2041-8HR11-2DA0	6ES7 522-1BH01-0AB0
6ES7 331-1KF02-0AB0	8 AI	voltage metering V		6EZ2041-8HR11-0AE0	6ES7 531-7KF00-0AB0
6ES7 331-7KF02-0AB0	8 AI	U / R / T-metering V		6EZ2041-8HR11-1AE0	6ES7 531-7KF00-0AB0
6ES7 331-1KF02-0AB0	8 AI	voltage metering mV		6EZ2041-8HR11-0AE1	6ES7 531-7KF00-0AB0
6ES7 331-7KF02-0AB0	8 AI	current metering / 4-wire-transducer		6EZ2041-8HR11-1AE1	6ES7 531-7KF00-0AB0
6ES7 331-1KF02-0AB0	8 AI	current metering / 4-wire-transducer		6EZ2041-8HR11-0AE2	6ES7 531-7KF00-0AB0
6ES7 331-7KF02-0AB0	8AI	current metering / 2-wire-transducer		6EZ2041-8HR11-1AE2	6ES7 531-7KF00-0AB0
6ES7 331-1KF02-0AB0	8 AI	current metering / 2-wire-transducer		6EZ2041-8HR11-0AE3	6ES7 531-7KF00-0AB0
6ES7 331-1KF02-0AB0	8 AI	R- / T-Metering		6EZ2041-8HR11-0AE4	6ES7 531-7KF00-0AB0
6ES7 332-5HF00-0AB0	8 AO	U- / I		6EZ2041-8HR11-0AA0	6ES7 532-5HF00-0AB0
6ES7 332-5HB00-0AB0	2 AO	U- / I		6EZ2041-8HR11-1AA0	6ES7 532-5NB00-0AB0
6ES7 332-5HD01-0AB0	4AO	U- / I		6EZ2041-8HR11-2AA0	6ES7 532-5HD00-0AB0

width of module 25mm					
6ES7 321-1BL01-0AA0	32 DI	24 VDC		6EZ2041-8HR12-0DE0	6ES7 521-1BL10-0AA0
6ES7 321-1BH01-0AA0	16 DI	24VDC		6EZ2041-8HR12-2DE0	6ES7 521-1BH10-0AA0
6ES7 322-1BH01-0AA0	16 DO	24VDC	0,5A	6EZ2041-8UHR2-2DA0	6ES7 522-1BH10-0AA0
6ES7 322-1BL00-0AA0	32 DO	24 VDC	0,5A	6EZ2041-8HR12-0DA0	6ES7 522-1BL10-0AA0
6ES7 321-7BH01-0AB0	16 DI	24VDC		6EZ2041-8HR12-1DE0	6ES7 521-1BH10-0AA0
6ES7 322-1BH01-0AA0	16 DO	24VDC	0,5A	6EZ2041-8HR12-1DA0	6ES7 522-1BH10-0AA0
		open ended cable cable length is 0.5m unshielded		6EZ2041-8HR10-1DU0	20 pins
		open ended cable cable length is 0.5m unshielded		6EZ2041-8HR10-0DU0	
Accessories				6EZ2041-8UG00-0BG0	mounting angle (2 pieces)

S7-400	I/O	Voltage	Current	Adapter	S7-1500
6ES7 421-1BL01-0AA0	32 DI	24VDC		6EZ2041-8HR21-0DE0	6ES7 521-1BL00-0AB0
6ES7 422-1BL00-0AA0	32 DO	24VDC		6EZ2041-8HR21-0DA0	6ES7 522-1BL01-0AB0
6ES7 422-1BH11-0AA0	16 DO	24VDC	2A	6EZ2041-8HR21-1DA0	6ES7 522-5HH00-0AB0
6ES7 431-7QH00-0AB0	16 AI	current metering / 4-wire-transducer		6EZ2041-8HR21-0AE1	6ES7 531-7KF00-0AB0
6ES7 431-7QH00-0AB0	16 AI	current metering / 2-wire-transducer		6EZ2041-8HR21-0AE2	6ES7 531-7KF00-0AB0
6ES7 431-7QH00-0AB0	16 AI	U / R / T		6EZ2041-8HR21-0AE0	6ES7 531-7KF00-0AB0
6ES7 431-1KF00-0AB0	8 AI	current metering / 2-wire-transducer		6EZ2041-8HR21-1AE2	6ES7 531-7KF00-0AB0
6ES7 431-1KF00-0AB0	8 AI	current metering / 4-wire-transducer		6EZ2041-8HR21-1AE1	6ES7 531-7KF00-0AB0
6ES7 431-1KF00-0AB0	8 AI	U / R		6EZ2041-8HR21-1AE0	6ES7 531-7KF00-0AB0
6ES7 431-1KF20-0AB0	8 AI	voltage metering		6EZ2041-8HR21-2AE0	6ES7 531-7NF10-0AB0
6ES7 431-1KF10-0AB0	8 AI	voltage metering		6EZ2041-8HR21-2AE0	6ES7 531-7NF10-0AB0
6ES7 431-1KF20-0AB0	8 AI	current metering / 4-wire-transducer		6EZ2041-8HR21-2AE1	6ES7 531-7NF10-0AB0
6ES7 431-1KF10-0AB0	8 AI	current metering / 4-wire-transducer		6EZ2041-8HR21-2AE1	6ES7 531-7NF10-0AB0
6ES7 431-1KF20-0AB0	8 AI	current metering / 2-wire-transducer		6EZ2041-8HR21-2AE2	6ES7 531-7NF10-0AB0
6ES7 431-1KF10-0AB0	8 AI	current metering / 2-wire-transducer		6EZ2041-8HR21-2AE2	6ES7 531-7NF10-0AB0
6ES7 432-1HF00-0AB0	8AO	U / I		6EZ2041-8HR21-0AA0	6ES7 532-5HF00-0AB0

width of module 25mm					
6ES7 421-1BL01-0AA0	32 DI	24VDC		6EZ2041-8HR22-0DE0	6ES7 521-1BL10-0AA0
6ES7 422-1BL00-0AA0	32 DO	24 VDC		6EZ2041-8HR22-0DA0	6ES7 522-1BL10-0AA0
		open ended cable cable length is 0.5m unshielded		6EZ2041-8HR20-0DU0	
Accessories				6EZ2041-8UG00-0BG0	mounting angle (2 pieces)

switched on 2 S7-1500 modules