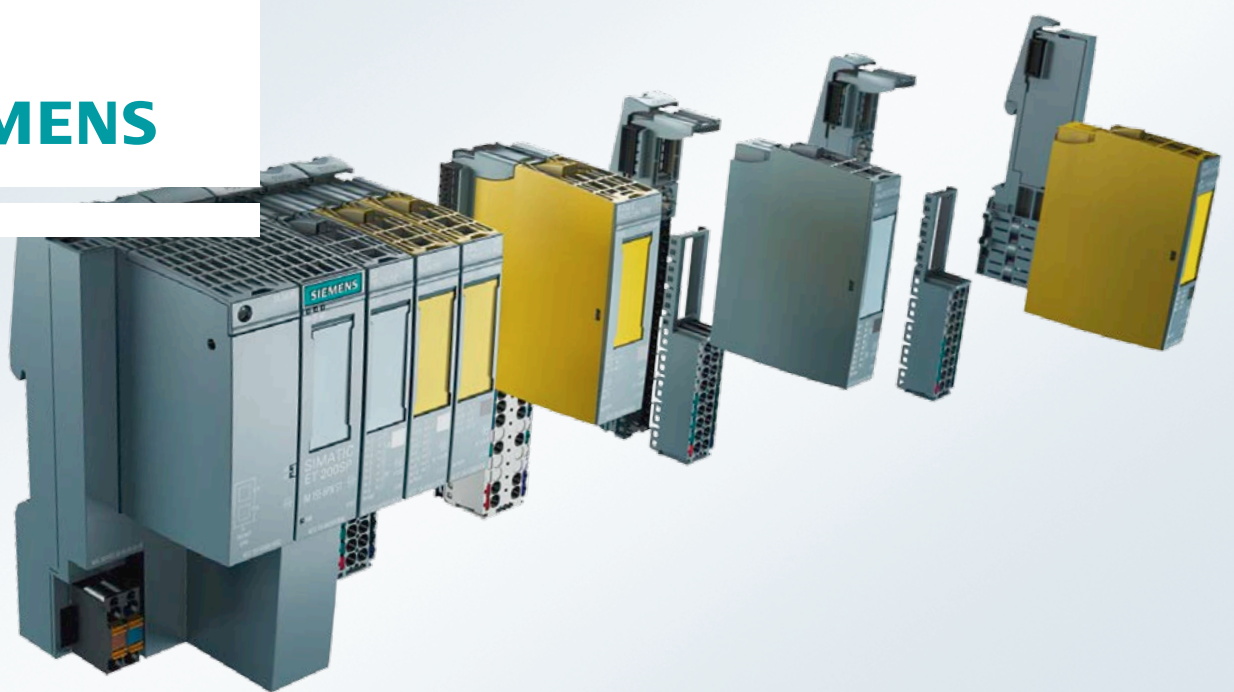


SIEMENS



[siemens.com/simatic-safety](https://www.siemens.com/simatic-safety)

The Ideal I/O also for Fail-Safe Applications:

Fail-safe modules for SIMATIC ET 200SP

The SIMATIC ET 200SP system range has been expanded to include fail-safe modules, certified for functional safety in accordance with IEC 61508. They are certified for safety-related applications up to SIL 3 in accordance with IEC 62061 and PL e in accordance with ISO 13849.

Advantages at a glance:

- **Investment protection**
Easy standard I/O expansion by fail-safe modules
- **Easy commissioning**
PROFIsafe address configuration via software and backup in the coding module
- **Easy device replacement**
Automatic transfer of the PROFIsafe address from the intelligent coding module
- **Comprehensive diagnostics**
 - Signal test onboard (e.g. short circuit, wire breakage)
 - Support of the "signal system fault" function
 - Channel-granular diagnostics
- **Optimum utilization of the control cabinet volume**
 - Module width reduction by up to 50 %
 - Support of load group formation without power modules

Easy plug-in module replacement



Intelligent coding module



A special highlight of the new ET 200SP safety modules: Within the scope of engineering, the F-addresses are assigned during commissioning and saved in the intelligent coding module. Following the module's initial plug-in, the coding module remains in the base unit. In case of an electronic module's replacement, the new module automatically imports the F-addresses from the coding module. This considerably eases the setup process and saves valuable time.

Answers for industry



Highlights at a glance

+ Utilization of the system advantages of ET 200SP also for fail-safe automation

- Module width reduction by up to 50 %
- Uniform handling for standard and F-modules
- Connection via standard interface modules
- Engineering with STEP 7 Safety Advanced in the TIA Portal and Distributed Safety

+ Advantages of the extended safety functionality

- Fast, direct group disconnection up to SIL 2/PL d with standard DQ and up to SIL 3/PL e with fail-safe F-DQs via F-PM-E
- Intelligent F-address configuration via software, i.e. elimination of DIL switches for F-addresses
- LED display for faults, operation, supply voltage and status

Modular system for maximum flexibility

The following safety modules are available in addition to numerous standard modules

Fail-safe digital input module F-DI 8 x 24 V DC High-Feature



- 8 fail-safe inputs (SIL 3, PL e)
- Integrated discrepancy evaluation with 2v2 signals

Width 15 mm

Art. No.: 6ES7 136-6BA00-0CA0

Fail-safe power module F-PM-E 24 V DC / 8 A PPM



- 2 digital F-inputs (1-/2-channel)
- 1 digital F-output (ppm-switching, up to 2 A, up to SIL 3/PL e)
- Control of F-DQ/potential group via onboard F-DI and/or F-CPU

Width 20 mm

Art. No.: 6ES7 136-6PA00-0BC0

Fail-safe digital output module F-DQ 4 x 24 V DC / 2 A PM High-Feature



- 4 fail-safe outputs
- 2-channel F-control (P/M-switching) of actuators up to 2 A

Width 15 mm

Art. No.: 6ES7 136-6DB00-0CA0

Fail-safe communication module F-CM AS-i Safety



- 31 safe 2-channel AS-i inputs with integrated discrepancy evaluation
- Optional control of 16 safe AS-i outputs

Access to AS-i I/Os related to F-DI and F-DQ modules

Width 20 mm

Art. No.: 3RK7 136-6SC00-0BC1

Digital F-electronic module relay 1 F-RQ DC 24 V DC / 24 .. 230 V AC / 5 A



- 1 relay output (2 NO contacts)
- Summation output current 5 A
- External control of safety relays

Width 20 mm

Art. No.: 6ES7 136-6RA00-0BF0

Further information:

SIMATIC ET 200SP F-modules:
siemens.com/et200sp

Fail-safe SIMATIC:
siemens.com/simatic-safety

Safety Integrated:
siemens.com/safety-integrated