

# SIMATIC ET 200S COMPACT – Block I/O expandable with fine modularity

The SIMATIC ET 200S COMPACT adds a PROFIBUS interface to the field-proven SIMATIC ET 200S multifunctional I/O system. This can be used as block I/O or as a finely modular I/O station.

The new IM 151-1 COMPACT interface module comprises a terminal module and an electronic module. The block contains 32 channels and can be expanded with fine modularity to a up to 80 channels (analog and digital mixed) or with a maximum of 12 modules.

The module range of the field-proven ET 200S – with the exception of the failsafe modules – is available for finely modular expansion. The modules can be combined in any way: Simple I/O modules, technology modules, motors starters, frequency inverters, pneumatic modules, etc. The station is expanded simply and quickly by means of the integral backplane bus.

The fixed wiring reduces potential sources of error to a minimum. In the event of a fault, load groups can be shut down individually and selectively on the block.

The ET 200S COMPACT is available in two versions:

- Purely digital input module 32DI
- Digital mixed module 16DI/16DO

## Engineering

Configuring is carried out in a user-friendly way using SIMATIC STEP 7. SIMATIC ET 200S COMPACT can be used from STEP 7 V5.3 SP3. It is necessary to install the Hardware Support Package (HSP) for this purpose (see the STEP 7 online help). In addition, a GSD file for connecting to non-Siemens systems is available under the following link: <http://support.automation.siemens.com/WW/view/de/652154>



ET 200S COMPACT maximum configuration



## Product features

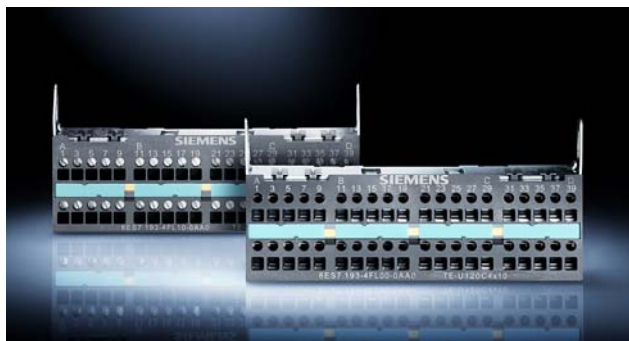
- Function-oriented, cost-optimized station design
- Scalable I/O station:
  - Block I/O or
  - Expandable with up to twelve modules from the field-proven ET 200S module range (except F modules)
- Enhanced availability thanks to module replacement during operation (hot-swapping of the expansion modules)
- Simplified spare parts management since fully integrated into the ET 200S system
- Space savings in the control cabinet thanks to high channel density
- Know-how protection
  - Field-proven ET 200S design
  - Identical ET 200S look-and-feel in configuring
- Cost savings thanks to establishment of up to 80 channels on one ET 200S COMPACT station, that is
  - fewer PROFIBUS connectors
  - reduced wiring overhead
  - reduced time overhead
- Fixed wiring
- Connections: Screw-type or spring-loaded terminals
- Standard terminal block in two-wire technology
- Module-specific diagnostics
- Full address range from 0 to 125 for PROFIBUS DP

## Configuration

The block I/O comprises a terminal module with PROFIBUS connection and up to 32 channels, and an electronic module. A clever snap-in mechanism permits quick and easy removal or insertion of the electronic module – even during operation. The fixed wiring remains in place. The terminal module is available optionally with either screw-type connections or spring-loaded connections. The basic version allows the connection of two-wire sensors / actuators.

## Expandable terminals

Easy snap-on auxiliary terminal blocks with a width of 120mm are available as accessories. The auxiliary terminal block contains 40 terminals in four load groups. Groups of ten terminals are already bridged internally.

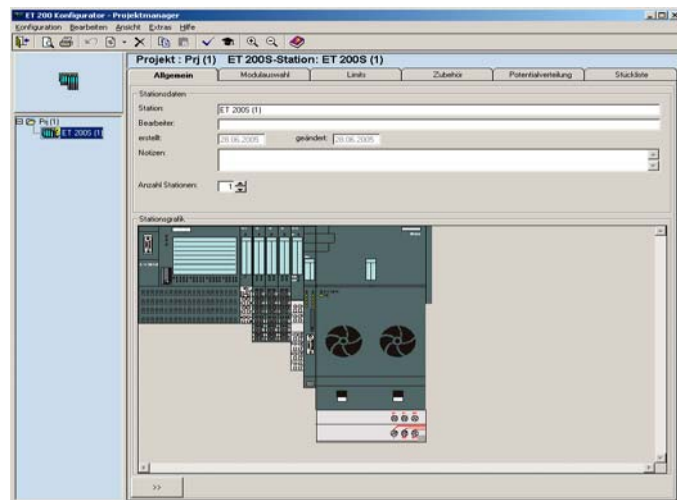


Auxiliary terminal blocks for ET 200S COMPACT

With plug-in jumpers, up to four load groups with different potentials (up to 24VDC) can be formed. Thanks to the auxiliary terminal blocks, direct connection of three-wire and four-wire sensors / actuators is also possible without separate terminals.

## SIMATIC ET 200 Configurator

With the SIMATIC ET 200S Configurator, you simply put together your expanded ET 200S COMPACT station. The Configurator is available under the following link: [www.siemens.de/et200s](http://www.siemens.de/et200s)



Technical specifications	Electronic block 16DI/16DO	Electronic block 32DI
Rated input voltage	24VDC	24VDC
Input delay	typ. 3ms, fixed	typ. 3ms, fixed
Rated output voltage	24VDC	-
Rated output current	0.5A per module / 4A per group	-
Characteristic curve	-	Type 1, in accordance with IEC1131
Automatic baud rate detection	9.6 kbd to 12 Mbd	9.6 kbd to 12 Mbd
Status indication	Green LED / channel	Green LED / channel
Diagnostics: module diagnostics	<ul style="list-style-type: none"> <li>Local display for SF-LED</li> <li>Diagnostics via PROFIBUS standard mechanisms</li> <li>Can be switched on/off via parameterization</li> </ul>	<ul style="list-style-type: none"> <li>Local display for SF-LED</li> <li>Diagnostics via PROFIBUS standard mechanisms</li> <li>Can be switched on/off via parameterization</li> </ul>
Alarms	None	None
Electrical isolation	<ul style="list-style-type: none"> <li>Between the outputs and the electronics: yes</li> <li>Between outputs: yes, in groups of 8</li> </ul>	<ul style="list-style-type: none"> <li>Between the inputs and the electronics: yes</li> <li>Between inputs: yes, in groups of 16</li> </ul>
Order number	6ES7 151-1CA00-3BL0	6ES7 151-1CA00-1BL0
Terminal block two-wire connection, spring-loaded terminals	6ES7 193-4DL00-0AA0	
Terminal block two-wire connection, screw-type terminals	6ES7 193-4DL10-0AA0	
Auxiliary terminal block three/four-wire connection, spring-loaded terminals	6ES7 193-4FL00-0AA0	
Auxiliary terminal block three/four-wire connection, screw-type terminals	6ES7 193-4FL10-0AA0	