PLC AUTOMATION

S500 I/O system
Easy solution for changing customer needs
Significantly more...

Easiness

Efficiency

Flexibility
Straightforward engineering
Scalable product range for high availability

The S500 I/O module range, which is part of the AC500 PLC platform, can be used with the AC500 PLCs and other controllers. Whether for standard situations or extreme conditions: With these I/O modules you will have a cost-efficient solution with low technical barriers in many industry segments, especially in water & wastewater, food & beverage, paper or data centers. In addition to saving time and money you will benefit from more…

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Easiness

- Fast integration into existing environment
- Easy integration with third-party PLCs
- Lean portfolio covers all requirements
- I/O modules with configurable channels allow for less inventory

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Efficiency

- Configurable I/Os reduce footprint & price
- Hot-Swap I/Os for increased availability
- Fast counters on each module
- Pre-wiring possible
- Scalable assortment optimizes price

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Flexibility

- Terminal units which fit many different I/O modules
- Openness with support of different fieldbus protocols
- S500-eCo and standard S500 I/O modules can be mixed
- Configurable channels make subsequent configuration change possible
Scalable S500 I/O concept
Modular offering fits many applications

**Communication interface modules**
Available for common fieldbuses:
- PROFIBUS-DP
- PROFINET
- EtherCAT
- Modbus TCP
- CANopen

**I/O bus**
Transmits process data between communication interface module and I/O modules

**Terminal units for communication interface modules**
Variants for different fieldbus types

**Terminal units for I/Os**
Variants with screw or spring connection

**Integrated I/Os**
Up to 24 I/O channels in the communication interface module save space
**S500 I/O modules**
With up to 32 channels in variants for analog and digital signals

**Compact S500-eCo I/O modules**
With up to 16 channels in variants for analog and digital signals

**Terminal units for Hot Swap of I/Os**
For exchange of I/O modules while the system is running

**Removable terminal blocks**
Push-in spring or screw connectors for cables up to 2.5 mm²
**Variety of fieldbuses supported**
One I/O system for all protocols

Third-party PLCs, IPC or machine controller

Controller can also be an industrial PC with ABB Ability™ for data center

- PROFINET/PROFIsafe
- Ethernet/IP
- Modbus
- AC500-eCo V3 as intelligent Ethernet/IP I/Os
- AC500-eCo CPU as intelligent I/Os
- ACS880-M04
- Field devices
- Drive
- Motor
- ACS580-M04
- 5500 I/O modules combined with 5500 I/O modules
- 5500 standard I/O modules combined with safety I/O modules
- 5500 I/O modules
- 5500-eCo I/O modules combined with 5500 I/O modules
Benefits with S500 I/O system

ABB provides tailor-made solutions to run customers’ plants uninterruptedly, and to meet their quality and performance needs: Reliable and cost-effective applications with robustness and longevity throughout the life cycle.

**Reliable data center automation for efficiency**
ABB provides intelligent and energy-efficient solutions for data centers in different parts of the world. ABB Ability™ Data Center Automation makes real-time visualization and management possible. Direct system connection of a large number of unbundled S500 hot-swap I/Os helps with comprehensive, distributed monitoring to enable continuous balancing of data center demand and functionality – while maximizing availability and minimizing energy consumption.