PLC AC500 as advanced RTU controller
Easy to handle with intuitive tools

The scalable AC500 platform ranges from small to high-performance PLCs. The latter are able to handle thousands of I/O signals, do complex calculations and simultaneously send, receive and store huge amounts of data. The product range includes a great variety of operator panels.

Advantages of AC500 as RTU
AC500’s open system architecture adds value to your applications. In addition to general logic capacity, it offers advanced pre-calculation and communication possibilities.

AC500 CPUs and I/O modules fulfill requirements and offer features that are requested in industries where RTU units “Type 1 and 2” are used.

As an open communication platform, AC500 is compatible with IEC60870-5-104, IEC 61850, OPC UA, MQTT and Modbus TCP. Furthermore, Ethernet protocols based on TCP/IP and UDP can be developed by the user. Protocols such as Modbus RTU, ASCII, PROFIBUS and PROFINET, among others, can be used for connection to devices and actuators.

Applications and segments
AC500 has often been named the PLC of choice in the machinery and process industries.

Programming and configuration
The Ability™ Automation Builder is the one and only tool for programming, configuring and communication.

- One tool for the complete PLC Automation product family
- IEC61131-3 compliant
- Six programming languages incl. C and C++ for solving complex tasks
- A comprehensive set of ready-to-use libraries for time efficiency
- Machine safety standards up to SIL3 or PL e can be combined to form an integrated safety solution
Low-cost and power consumption, small footprint

Versions for extended operating temperature from -40 °C up to +70 °C

HTML5 integrated WEB interface

Hot swap, network redundancy

Data collector and concentrator, data logging and data storage

Communication capability Modbus, IEC60870-5-104, IEC 61850, OPC UA and more

Gateway functionality with telecontrol protocol

MQTT cloud connectivity

Cryptographic tools and security functionalities

IT network/internet
- MQTT
- OPC UA
- HTTP(S)
- FTP(S)
- SNTP

Factory/site network
- OPC DA/AE
- OPC UA
- UDP
- TCP/IP
- KNX
- BACnet
- MySQL / MSSQL
- HTTP(S)
- FTP(S)
- SNTP

Control network
- PROFINET
- EtherCAT
- Modbus TCP
- Modbus RTU
- PROFIBUS DP
- IEC 60870-5-104
- IEC 61850
- CANopen
- ASCII

Customer / OEM cloud

ABB Ability™

MES/ERP 800xA

HMI

CP600

Data base

AC500

AC500-eCo

AC500 cloud demo

ABB Automation Products GmbH
Eppelheimer Straße 82
D-69123 Heidelberg / Germany
Tel.: +49 62 21 701 1444
Fax: +49 62 21 701 1382

www.abb.com/plc