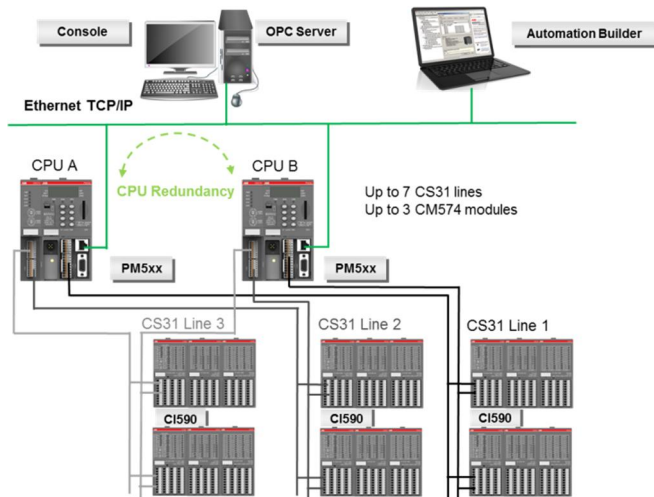


Automation Products GmbH

The AC500 High Availability Solution

– Hot-Standby Redundancy

The enhanced AC500 High Availability solution uses redundant components with Hot-Standby performance. It is based on the HA-Library V2.4 in combination with the new CPU Firmware 2.4



25.03.2015

Features of the new AC500 High Availability solution The Hot-Standby Redundancy concept

The target is to make fault tolerant systems simple and easy to implement. We use standard and proven CPUs, with efficient library blocks and effortless fieldbus integration.

The enhanced AC500 High Availability solution is based on the HA-Library V2.4 in combination with the new CPU Firmware 2.4 that ensures more connectivity capabilities with the field proven CS31 bus. The features of the new High availability library are:

- Hot Standby Redundancy
- Fast switch over in case of CPU damage or fieldbus interruption
- More CS31lines to build up larger systems by adding CM574 modules
- Significantly improved documentation and examples
- Comprehensive set of examples including CP600 redundant connection and IP-Swap

The AC500 High Availability solution uses redundant components with Hot-Standby performance. This means:

- Both CPUs are permanently running, operating in parallel, continuously synchronizing each other and monitoring the whole redundant system
- If the primary CPU is stopped, powered off or crashed or if a CS31 line is disconnected, the other hot standby CPU takes over by adopting primary status.

I/O signals are managed by the communication interface module CI590 which is communicating parallel to both CPUs through the CS31 bus: Inputs are simultaneously given to both CPUs. For the outputs an intelligent voter in each CI590 continuously decides which CPU provides the correct values. Thereby a fast immediate switch-over is ensured for the process. CI590 also sends diagnostic information to the CPU's which thereby always have all information even in case of a field network fault.

So AC500-HA ensures continued reliable operation of your plant and your application!

Automation Products GmbH

The AC500 High Availability Solution

– Hot-Standby Redundancy

Applications and Markets

- Infrastructure (Tunnels, Airports, Buildings)
- Water and Wastewater
- Chemical & petrochemical Industry
- Bulk material handling
- Power generation auxiliaries
- Critical machinery & equipment

The benefits

- Easy and fast solution for high availability
 - Hot stand-by mode for CPU, field- and control-station communication
 - Implementing redundancy on different levels to reduce the risk of losing production and consequently avoiding plant idle time
 - Existing systems can be expanded only with a second CPU and the High Availability library
- Flexible configuration
 - The CPUs can be mounted in different cabinets in order to increase availability
 - AC500 High Availability concept can be used with any standard AC500 CPU (not on eCo)
 - Covers from small to large systems, up to 7 CS31 lines
 - Standard and proven equipment (CPU 5XX, Communication Module CM574 RS)
 - Data Synchronization using Ethernet
- Providing High Availability with redundancy in Hot-Standby performance at a very attractive and scalable price/performance ratio
- One engineering Tool – Automation Builder
- New library is backward compatible

25.03.2015

ABB Automation Products GmbH
Wallstadter Str. 59
68526 Ladenburg
Germany
Phone: +49 (0) 6221 701-1444
Fax: +49 (0) 6221 701-1382
Email: plc.sales@de.abb.com
www.abb.com/plc
www.abb.com/drives
www.abb.com/automationbuilder

Note: We reserve the right to make technical changes or modify the contents of this document without prior notice. With regard to purchase orders, the agreed particulars shall prevail. ABB AG does not accept any

responsibility whatsoever for potential errors or possible lack of information in this document. We reserve all rights in this document and in the subject matter and illustrations contained therein.