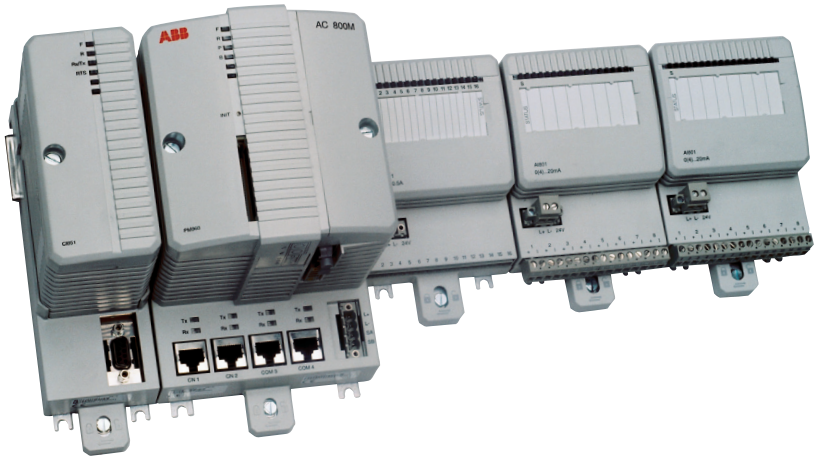
Industrial^{IT} AC 800M controller

Overview

Features and Benefits

- **Full modularity and flexibility for all environments**
  Many options make AC 800M exceptionally open. Its flexibility comes into its own when control applications change, expand or contract.
- **Scalable design for easy expansion**
  Simple to set up and easy to expand, AC 800M scales up as your control needs grow. Just add the extra modules your application requires.
- **Powerful control solutions and reusable libraries**
  Compact Control Builder software offers a wide range of powerful control solutions for the AC 800M controllers. Code re-use and libraries of ready-to-use functions promote efficient configuration.
- **Fault tolerance gives maximum availability**
  Robust design and redundancy options in all critical areas of the controller and its components eliminates single-point failures and secures maximum availability.
- **Memory card for storage of applications and data**
  A Compact Flash card can be used as a removable storage of applications and data.



Modular controller rich in communication, redundancy and support

Challenging business goals require a flexible and powerful controller. Compact Products 800 is a range of simple and cost-effective control products that fulfill such a need. Working individually or in combination, they help you control a broad spectrum of industrial processing applications. Compact Controller AC 800M is a key component of Compact Products 800.

AC 800M is a modular controller with a rich set of communication functions as well as full redundancy and support for a large range of I/O systems. When configured with Compact Control Builder software, AC 800M is open to participate in any kind of control solution. Re-use of code and libraries of ready-to-use functions also promotes an efficient configuration and setup.

The AC 800M family is based on rail-mounted modules and comprises the CPUs plus communation modules, power supply modules and a series of accessories. The broad range of I/O products supported by AC 800M controller includes also types that are intrinsically safe.

Industrial^{IT} enabled

ABB

AC 800M – scalable controller with choice of speed, memory and availability

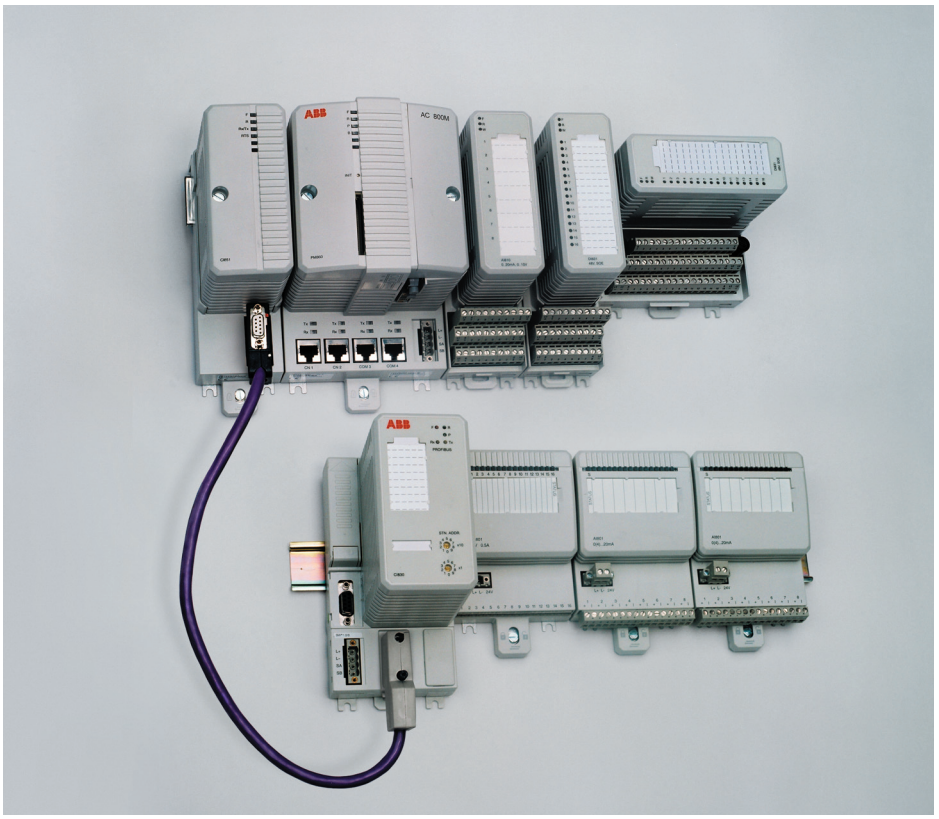


Figure 1. Rail-mounted AC 800M controllers and associated products provide flexible and cost-effective control solutions for many applications.

Flexible, cost-effective control solutions that are easy to implement and change are the hallmark of Compact Products 800. Like other products in this range, AC 800M controller is built with openness in mind. Individually or in combination with other products on the market, it creates reliable control solutions that are easy to afford and manage. Its rich set of functions help improve production control, maximize availability and minimize maintenance.

Full modularity and flexibility for all environments

Rail-mounted modules comprise CPUs, communication modules, power supply modules and accessories. Connectivity and expansion options make AC 800M exceptionally open and scalable; easy to connect and easy to adapt according to your current control needs. See figure 1.

The five CPU modules vary in terms of processing power, memory size, and redundancy support from low-cost, medium power to high-power, full redundancy. Each is equipped with built in Ethernet ports for communication with other controllers and for interaction with operators, engineers, managers and higher-level applications. These ports can be configured for redundancy when availability is of paramount importance.

Relevant communication and I/O modules include additional RS-232C ports to connect further third-party systems and devices, PROFIBUS and FOUNDATION interfaces to integrate I/O systems and access a wide range of field devices, and S800I/O family modules as direct and remote I/Os.

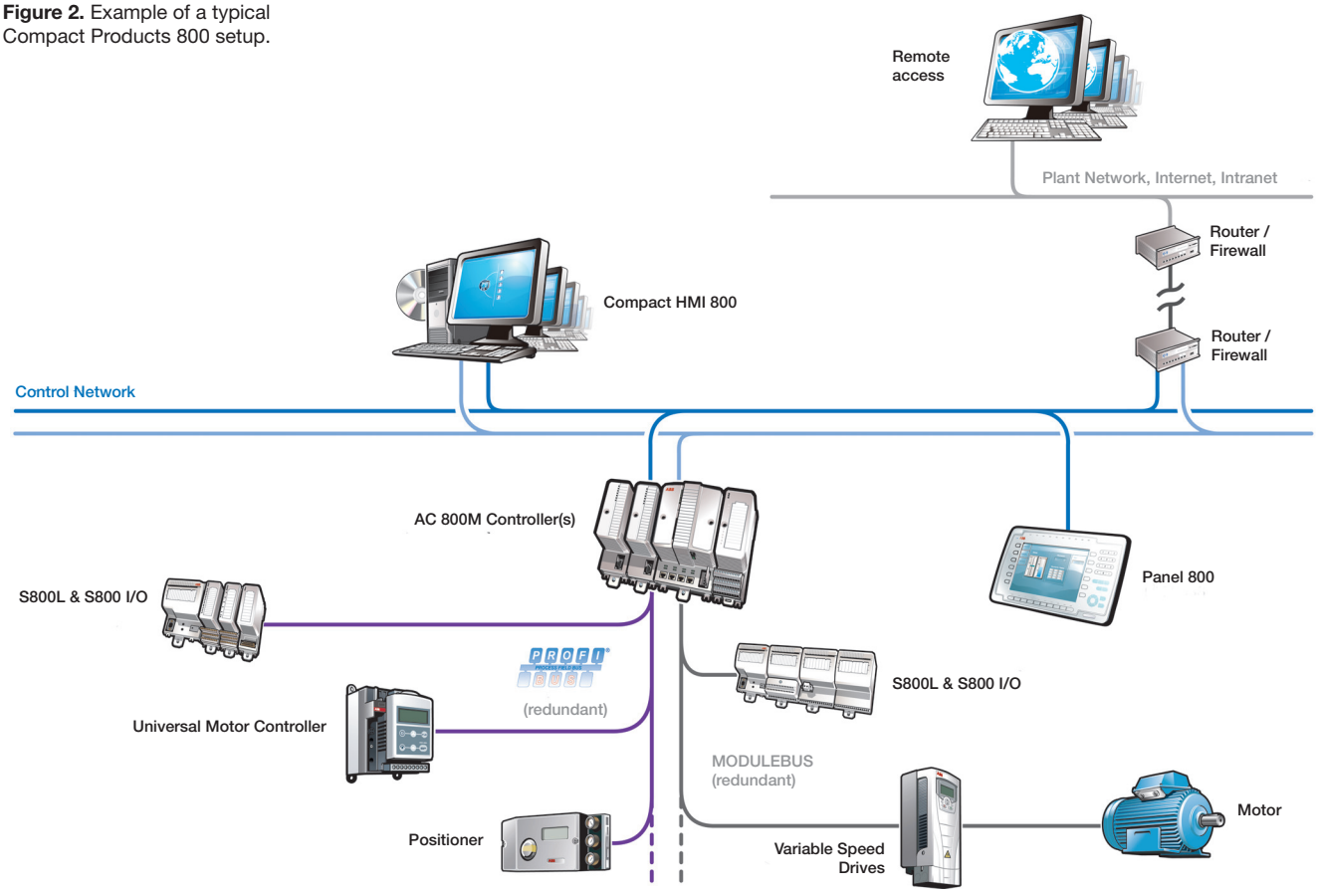
Scalable design for easy expansion

Scalability is a key attribute of the AC 800M controller. Its modular design makes it just as effective for small systems as for large, integrated automation applications. For a simple Compact Products 800 application, a basic controller station may consist of a controller, a power supply module and local I/O modules. To scale up, simply add the CPU, I/O, communication module and power-supply options you need. The AC 800M family makes it easy to match controller configuration with control need. See figure 2.

Fault tolerance gives maximum availability

Redundancy is available in all critical areas of the AC 800M controller and its associated components such as the power supply, CPUs, communication links and I/O circuits. Implementing all redundancy options eliminates single-point failures, thus helping secure maximum availability. The end result is seen in increased productivity and greater profit.

Figure 2. Example of a typical Compact Products 800 setup.



Powerful control solutions and reusable libraries

AC 800M controller is configured using the Compact Control Builder, a powerful software tool for creating logic, sequential and analog control-intensive automation solutions. Its powerful libraries are easily extended, making it the perfect tool for automation solution suppliers where standardization and reuse are the keys to cost-effective solutions. Compact Control Builder supports Compact Flash memory cards for loading applications direct into the target controller. Six programming languages are available; simply choose the one most suitable for your application.

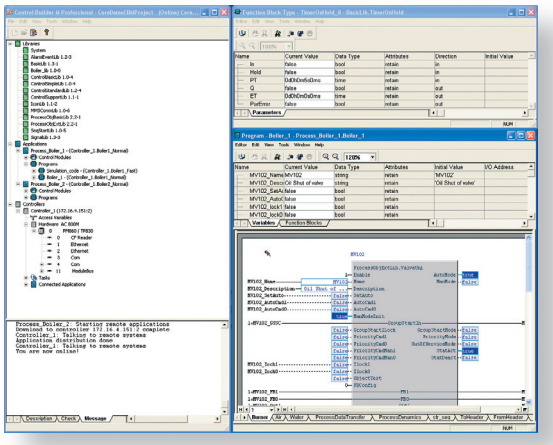


Figure 3. Compact Control Builder offers a wide range of powerful control solutions for the AC 800M controller.

Summary

The modular AC 800M controller has a rich set of communication functions as well as full redundancy and support for a large range of I/O systems. Together with Compact Control Builder and I/Os such as the S800L I/O and S800 I/O series, it helps you control a broad spectrum of industrial processing applications.

AC 800M controller is a key component of Compact Products 800. These simple and cost-effective control products work individually or in combination, and are based on standards that ensure they can be combined with other control products on the automation market.

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