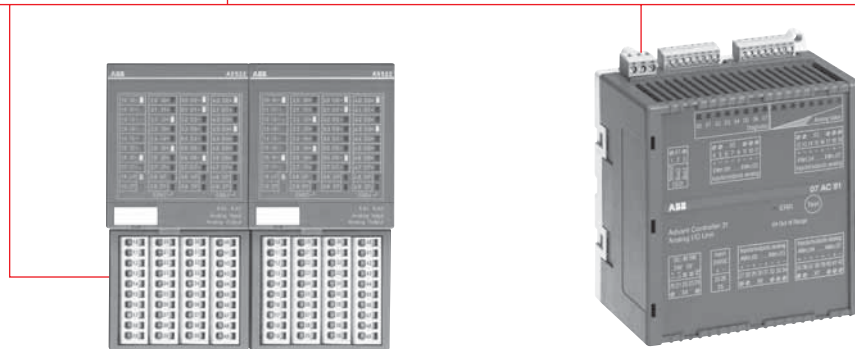
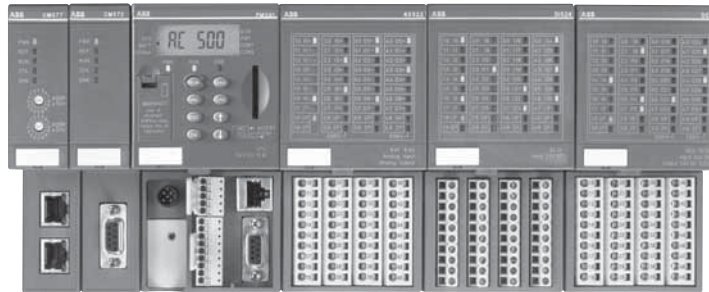


# Communication CS31

## CS31



### CS31 (Communication Serial Field Bus, developed by ABB in 1989) for continuity and migration

CS31 is a proprietary master/slave field bus. It is characterized by simple handling, easy configuration, and inexpensive installation. The COM1 interface of the AC500 can be configured as a CS31 field bus master.

#### Communication

Is handled using polling, i.e. the master sends a request to the slave and then receives the response. The CS31 operating mode of COM1 is set using the engineering tool.

#### Topology

Multi-point line, RS485, approved without branch lines. A system consists of one master and up to 31 slaves. The maximum cable length is 500 m, or 2 km with an amplifier. Slaves are primarily decentralized input/output modules with integrated CS31 bus connection.

#### Data transmission

Is performed at 187.5 kB/s. Each telegram has an 8-bit CRC appended. The telegrams enable process data (input/output data) to be written and read.

#### Transmission medium

Primarily a twisted-pair, shielded cable with terminators. Other transmission media: fiber-optic cables via a converter (glass fibers max. 3 km, plastic max. 100 m), contact lines, slip rings (bus length max. 50 m) and data photocells.

#### Diagnostics

Detailed diagnostic messages for rapid trouble-shooting are shown on the CPU display.