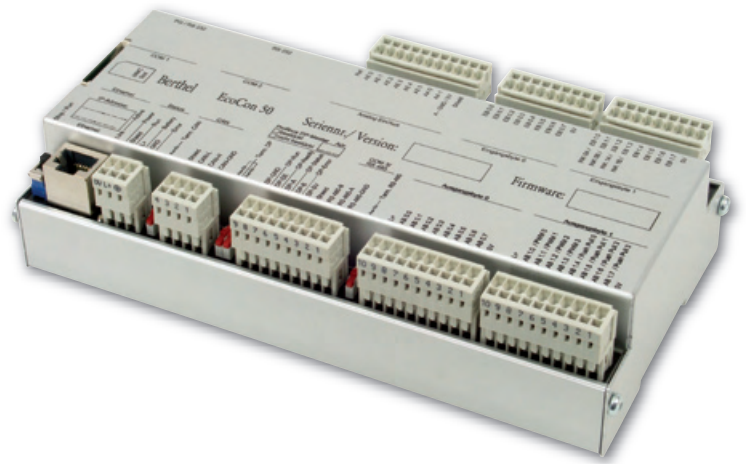


## EcoCon 50

The EcoCon is a control system for top hat rail mounting with an excellent price/performance ratio.

The programming takes place with STEP 7® from Siemens. Compatible with Siemens S7 300 CPUs, it possesses enormous main memory and optional external SD memory, apart from extensive onboard periphery, Ethernet and CANopen, as well as three serial interfaces.



### General

• Power supply:	24 V DC (18 - 36 V DC)
• Dimensions:	200 x 106 x 60 mm (W x H x D)
• Weight:	approx. 800 g
• Operating temperature range:	0 ... +50° C
• Storage/transportation temperature range:	-30 ... +80° C
• Humidity:	25 - 85 % relative humidity
• CE certification:	EN 61000-6-2 and EN 61000-6-4
• Place of manufacture:	Made in Germany

### PLC

- Programmable with STEP 7® from Siemens
- 1 PG interface RS 232
- 1 free serial interface (1x RS 232, 1x RS 485)
- Battery-backed virtual memory: 128KB code, download memory 352KB data
- 4096 flags, 512 timers, 512 counters, 1024 FBs, FCs, DBs each
- Internal flash memory for backup of the S7 application program/visualisation project data
- SD/MMC slot (for external memory up to 4GB for trend and alert archiving and S7 program)
- Real-time clock
- Ethernet 10 / 100 Mbit
- CANopen master / (Slave) onBoard
- Profibus master / (Slave) optional

### Decentralised periphery

- Berthel CAN periphery (auto mode – without CAN experience)
- External CAN slaves (e.g. WAGO, Lenze, LUST, SEW...)
- External profibus slaves (e.g. WAGO, Lenze, LUST, SEW...)

### OnBoard periphery

#### Inputs:

- 16 digital inputs 24 V DC
  - of which 8 can be interrupted,
  - of which 4 can be used as 2 incremental encoders,
  - of which 2 can be used as capture inputs for pulse length measuring and cycle duration measurement
- 4 analogue inputs (12 bits, 0 ... 10 V oder 4 ... 20 mA)
- 2 analogue inputs (10 bits, 0 ... 10 V)

#### Outputs:

- 16 digital outputs 24 V DC / 0,5 A
  - of which 4 can be used as PWM outputs (push/pull)
- 2 analogue outputs (12 bits, -10 ... +10 V)

### Communication / protocols

#### Fieldbuses:

- CAN (CANopen and CAN layer2) Special feature: CANopen periphery can be applied in auto mode without CAN knowledge
- Profibus DP master/slave optional

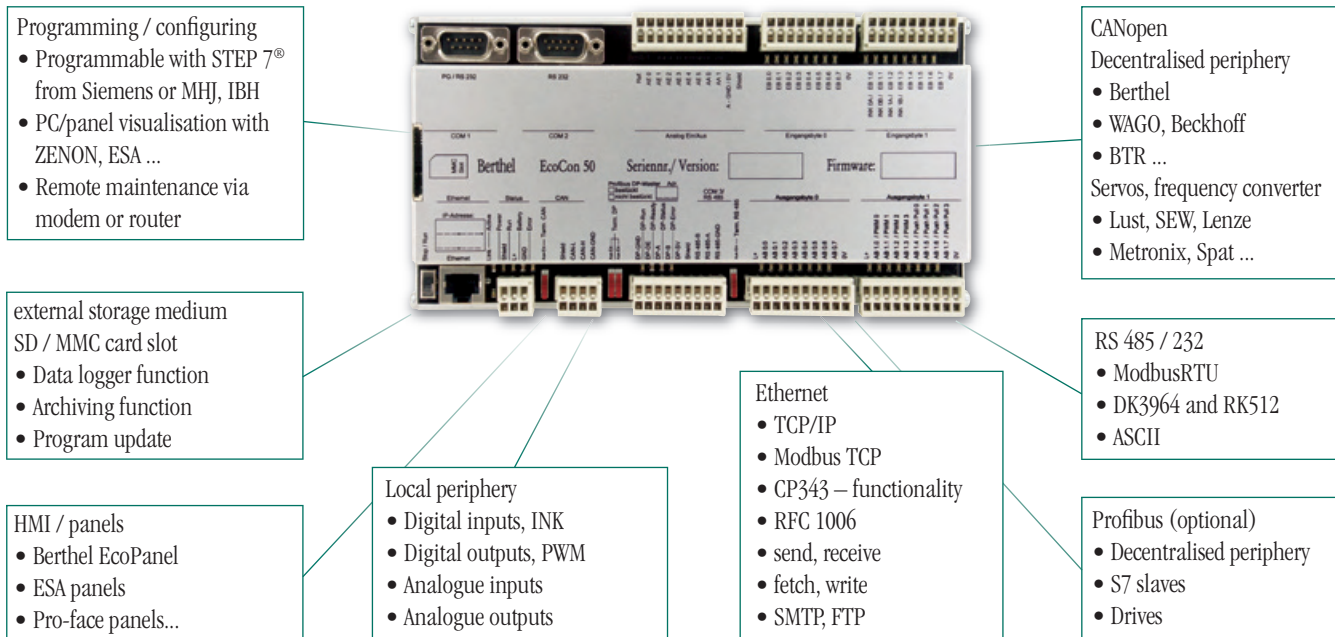
#### Ethernet:

- RFC 1006 (S7 protocol)
- SEND/RECEIVE via TCP / UDP
- UNSPECIFIED UDP
- MODBUS-TCP
- HTTP (web-server), SMTP-client (email), FTP (server and client)

#### Serial:

- Free ASCII protocol DK3964 and RK512
- MODBUS-RTU (master and slave)

# S7-PLC



## Project requirements

- Are you looking for a solution in the field of energy supply or for large capacity circuit switching, as in communal power stations, small hydroelectric power stations or industrial kilns? ➤
- You want to move small quantities easily and cost-effectively, as for example in roller conveyors or dosing machines? ➤
- Do you have an application requiring the moving of heavy objects, or a quick movement is required, e.g. electric trolley conveyors, packaging machines or handling equipment? ➤
- Do you need many inputs and outputs in a small space for your applications? ➤
- Do you have to process measurement data and carry out controls, for example for bakery machinery, cold rooms and climatic chambers? ➤
- Do you need extensive formulation management or housekeeping, e.g. in the foodstuffs sector or in the area of stock keeping and stock automation? ➤
- Do you have to capture and transfer data, e.g. in operator-free transportation systems or in the capture of operational and process data? ➤

## solution possibilities

- The integrated capture inputs measure precise pulse or cycle durations, with the alarm inputs it is possible to ensure network-synchronised signal processing.
- The PWM outputs make the direct connection of DC motors or stepper motors possible.
- A multitude of servo regulators can be controlled via the integrated CANopen master.
- A simple and cost-effective solution can be reached with the aid of the onboard periphery and decentralised CAN periphery.
- The integrated, quick regulator and the comprehensive S7 library for measurement and control technology provide you with extensive possibilities.
- The integrated formula management and the large memory give you freedom of movement.
- All possibilities are open to you with the integrated Ethernet connection.

## Special requests?

Berthel already makes economic solutions specified by client for their special requirements in case of small ranges possible. Send your request for a concept free of charge!