



Front view

The Controller S320 is a universal measurement and control unit with high computing velocity and analog signal resolution up to 24 bit.

- 32 bit signal processor
- Programming language similar to Pascal
- Three 7 digit segment and three text displays
- 5 slots for Slotcards
- Digital in- and outputs upgradeable up to 256 per slot
- Serial and network interfaces

Model Description

A 32 bit signal processor, 2048 kB RAM, 4096 kB Flash-ROM, Real Time Clock and a battery-buffered 32 kB data storage are building the very powerful computing heart of the controller. The controller is free programmable with a Pascal similar programming language. Beneath basic functions like mathematical calculations and text functions, the development environment of the controller contains many further prepared useful programming functions.

In the front panel there are three lines with segment displays and text displays. A direct input to the controller is possible through 5 functional keys. The standard supply is 24 volt. Eight internal digital inputs and digital outputs are integrated for the simple communication with a PLC or for switching valves for example. Digital data can be transferred through the serial interfaces RS232 and RS485 or the Ethernet interface.

Five slots for slotcards are provided to expand the controller for specific functions. Connected sensors are supplied by the 24 VDC supply of the controller. Slotcards are available for measurement and output of current, voltage, impulse and frequency, furthermore with type 400 slot card and with external digital modules to expand the digital inputs and outputs.

Specification

Housing and Dimensions

Panel mount housing DIN IEC 61554, 96 x 96 x 160 mm

Display, Keypad

3 seven digit segment display 10 mm, 6 digit

3 text display 5 mm, 4 digit

5 functional keys

Supply

24 Volt DC, ca. 8 Watt

Slots

5 slots for slotcards, for additional digital inputs and outputs with Type400 RS485 bus module and digital modules



Rear view

Digital Interfaces (internal)

8 digital outputs, 24V SPS-compatible

8 digital inputs, 24V SPS-compatible

Data interfaces

1 interface RS232, programmable

2 interfaces RS485, programmable

1 Programming link interface to a PC

1 Network interface for a local ethernet

Software

Programming

Controller basis 32-bit signal processor (DSP-TMS320C32)

2048 kB RAM, Real Time Clock, Watchdog

4096 kB Flash-ROM, 32 kB RAM battery-buffered

Ordering Information

Part-No.-Structure: S320-S1-S2-S3-S4-S5-M1-M2-M3

Sx S1 to S5 Slot with slotcard

A	Type100	2x analog input current, voltage, Pt100
B	Type101	2x analog input alternating voltage (i.V.)
C	Type110	2x analog input current, voltage, Pt100
D	Type120	4x analog input voltage 0-10V
E	Type200	2x analog output current, voltage
F	Type220	4x analog output voltage 0-10V
G	Type310	1x analog input 1x analog output
H	Type400	RS485 Bus module for DI and DO extension
I	Type500	2 x Input incremental encoder
J	Type510	2x input increment / frequency measurement
K	Type520	2 x output frequency and PWM
X		Free slot

Mx M1 to M3 External Bus-Modules

A	MOD410	16xDI, for top hat rail, 35mm
B	MOD420	16xDO, for top hat rail, 35mm
C	MOD430	8xDI, 8xDA, for top hat rail, 35mm
D	MOD412	16xDI, 19"- for rear panel, 3HU 7DU
E	MOD422	16xDO, 19"-for rear panel, 3HU 7DU
F	MOD432	8xDI, 8xDO, 19"-for top hat rail, 3HU 7DU

Slotcards in the 5 slots: Don't forget specifications for supply and analog signal range in your order:

AI max. voltage -2,5 to 10V, max. current 0 - 24 mA,
AO max. voltage -2,5 to 10V, max. current 0 - 24 mA,
voltage encoder 5V, 10V, 15V, 24V and 1 mA for Pt100

Part-No. Accessory

S320-NAD01 Table supply 100-240VAC/24V ~30 VA

S320-NAD02 Top hat rail supply 100-240VAC/24V ~30 VA

Further accessories on demand