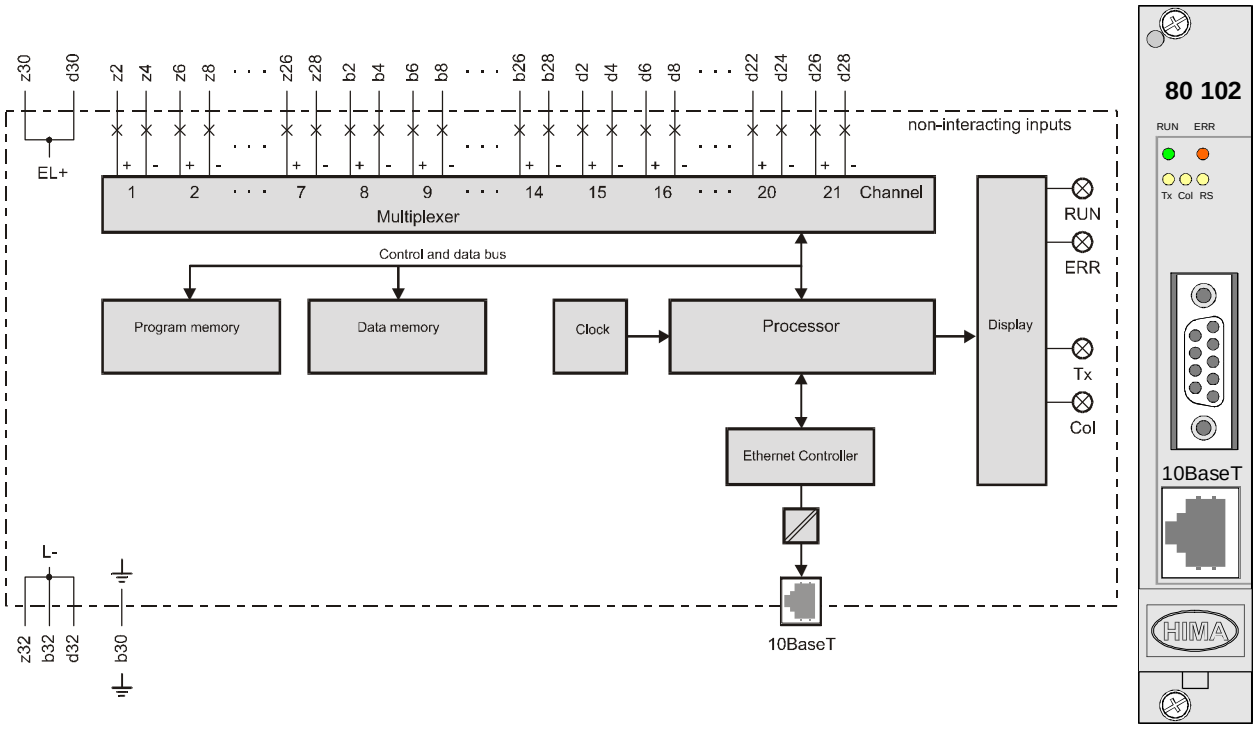
80 102

Communication Module 80 102
for data transfer from the Planar4 System
via Ethernet (with OPC-Server)



The communication module is used to transfer data from the modules of the Planar4 System to other systems.

Up to 21 modules of the Planar4 System can be connected to the input channels (z2-z4, z6-z8, ... d26-d28) for internal communication. For this application the Planar4 subracks with bus PCB should be used which already contain the necessary connections. The module locations 1...20 of these subracks are provided for Planar4 modules, the 21st location is reserved for the communication module.

The data transfer to other systems is made via Ethernet (with OPC server), connector RJ-45.

The data transfer via Ethernet is described in the chapter “Communication” in the Planar4 system manual and in the manual “HIMA OPC Server”.

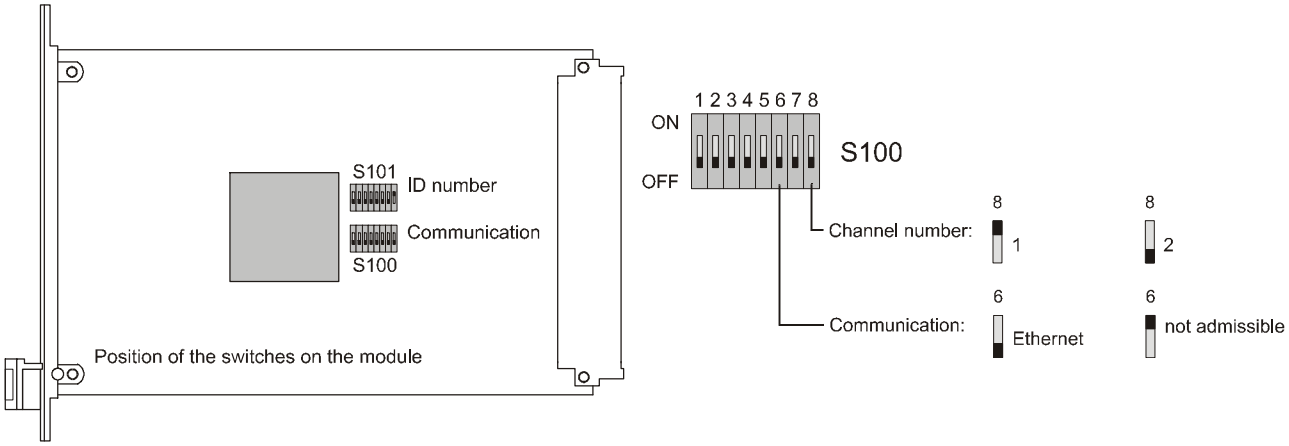
Processor	32 bit
Main memory	4...16 MB
Connections	RJ-45 (10BaseT)
	RS 485 (not used)
Operating data	24 V DC / 300 mA
Space requirement	3 U high, 4 SU

After switching on the power supply a memory test is proceeded; during this time the displays RUN and ERR are flashing synchronously. If RUN is on and ERR is flashing, there is a communication error between the Planar4 modules and the communication module.

Display Readings During Operation (LED)

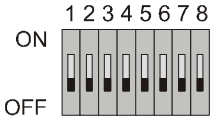
LED	LED	Operation Mode
RUN=ON	ERR=OFF	Communication active
RUN=flashg.	ERR=flashg.	Booting of communication module
RUN=OFF	ERR=ON	Error in communication module
RUN=OFF	ERR=flashg.	Error in communication module Uploading of errors ***Do not unplug communication module!***
TX		Transmitting LED Ethernet
COL		Collision on the Ethernet segment

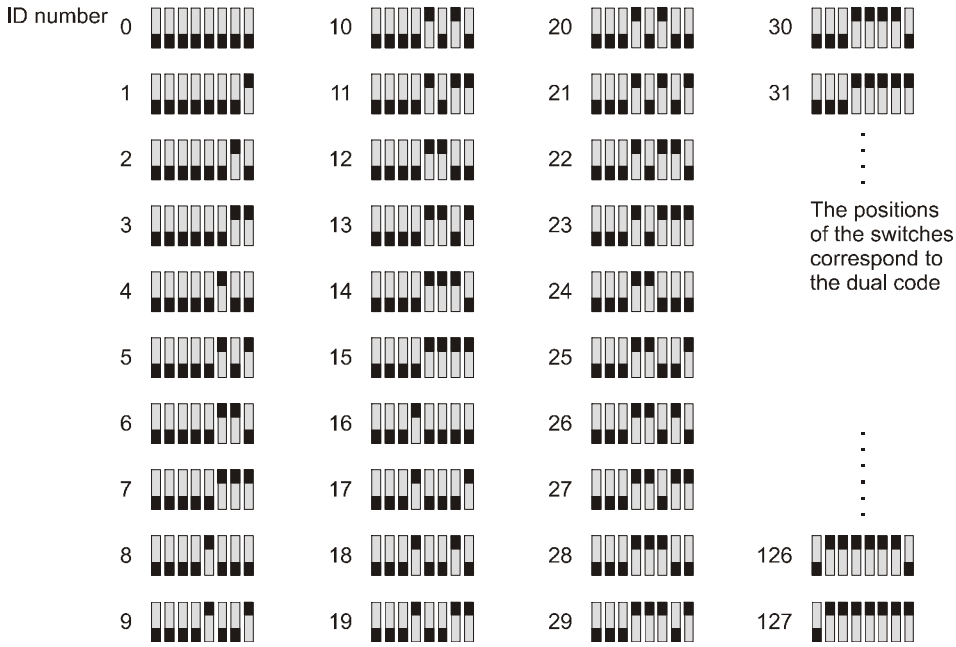
Switches for settings



Communication via Ethernet

The communication modules are connected with a twisted-pair cable via the RJ-45 connector to an Ethernet hub which is linked to the Ethernet card of the OPC server. Each communication module module has an own ID number; the setting (0...127) is made with switches on the module.





Setting of the ID number

Pin occupation of the connector RJ-45

RJ-45 is an 8-pole connector, internationally standardized for the linkage of STP/UTP lines according to IEEE 8023 (10BaseT).

Pin Nr.	Signal	Funktion
1	TD+	Transmit data +
2	TD -	Transmit data -
3	RD +	Receive data +
4		not used
5		not used
6	RD -	Receive data -
7		not used
8		not used

Note

For using the communication module outside a Planar4 subrack with bus PCB it is important for the wiring that the communication lines between the Planar4 modules and the communication module are twisted in pairs and additionally screened if possible. The line must be connected with correct polarity and may not exceed the length of one meter. The screens must have a single-end connection to earth.

For your notes