1.1 IF772

1.1.1 General Information

The IF772 interface module is an aPCI module and can be installed in all corresponding interface module slots (e. g. in the CP360).

The module is equipped with a modem capable RS232 interface and two CAN bus interfaces, with their own object buffers in send and receive direction.

1.1.2 Order Data

Model Number	Short Description	Image
	Interface Module	
3IF772.9	2005 aPCI interface module, 1 RS232 interface, 2 CAN bus interfaces, max. 500 kBit/s, CAN bus: electrically isolated, network capable, object buffer in send and receive direction. Order 2 x 0TB704.9 terminal blocks separately.	
	Required Accessory	
0TB704.9	Accessory terminal block, 4-pin, screw clamp, 1.5 mm²	
	Optional Accessory	
0G0001.00-090	Cable PC <-> PLC/PW, RS232, online cable	

Table 1: IF772 order data

1.1.3 Technical Data

Product ID	IF772
Short Description	
Communication Module	1 x RS232, 2 x CAN bus
Interfaces	
Interface IF1 Type Design Maximum Transfer Rate	 RS232 9 pin DSUB connector 115.2 kBit/sec
Interfaces IF2 and IF3 Type Design Maximum Transfer Rate	 CAN bus 2 x 4-pin multipoint connector 500 kBit/sec
General Information	
Status Display	2 LEDs for sending/receiving data for IF1 1 LED each for sending data for IF2 and IF3
Diagnostics Data Transfer	 Yes, with status LEDs
Electrical Isolation PLC - IF1 PLC - IF2/IF3 IFx - IFx	 No Yes Yes
Power Input 3.3 V 5 V Total	 0.2 W 1.8 W 2.0 W
Certification	CE, C-UL-US, GOST-R
Mechanical Characteristics	
Slot	Insert e.g. in CP360
Protection	IP20
Operating/Storage Temperature	0 °C to +60 °C / -25 °C to +70 °C
Humidity	5 to 95% (non-condensing)
Note	Order 0TB704.9 terminal blocks (2x) separately

Table 2: IF772 technical data

1.1.4 Additional Technical Data

Product ID	IF772
IF1 interface, RS232	
Controller	UART Type 16C550 compatible
FIFO	16 bytes in send and receive direction
Input Filter / Protective Circuit	Yes
Maximum Distance	15 m / 19,200 baud
Handshake Lines	RTS, CTS

Table 3: IF772 additional technical data

Product ID	IF772
Network Capable	No
Data Formats Data Bits Parity Stop Bits	 5 to 8 Yes / No / Even / Odd 1 / 2
IF2 and IF3 interfaces, CAN bus	
Controller	Controller SJA 1000
Maximum Distance	1000 m
Maximum Transfer Rate Bus Length ≤60 m Bus Length ≤200 m Bus Length ≤1,000 m	 500 kBit/sec 250 kBit/sec 50 kBit/sec
Network Capable	Yes
Bus Termination Resistor	Externally wired (optional)

Table 3: IF772 additional technical data (cont.)

1.1.5 Operational and Connection Elements

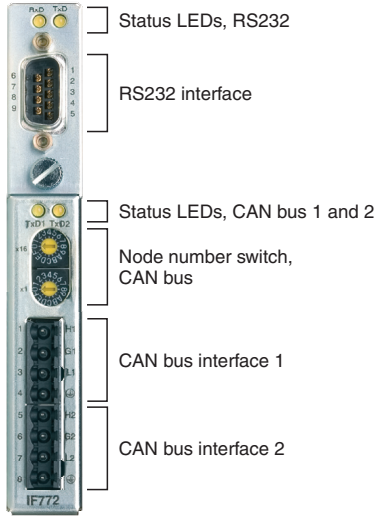


Figure 1: IF772 operational and connection elements

1.1.6 Status Display RS232 Interface

Image	LED	Color	Description
RS232 	RXD	Orange	The module receives data via the RS232 interface.
	TxD	Orange	The module sends data via the RS232 interface.

Table 4: IF772 status display RS232 interface

1.1.7 Status Display CAN Interfaces

Image	LED	Color	Description
CAN 	TxD 1	Orange	The module sends data via the CAN bus interface 1.
	TxD 2	Orange	The module sends data via the CAN bus interface 2.

Table 5: IF772 status display CAN bus interface

1.1.8 RS232 Interface (IF1)

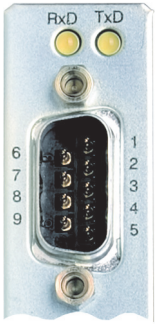
Interface	Description	Pin Assignments		
Application Interface RS232  9-pin DSUB plug	The standard RS232 interface is not electrically isolated. LEDs show on the interface whether data is being received (RxD) or sent (TxD). The shield is connected to the DSUB connectors housing. Max. transfer rate: 115.2 kBaud Max. Cable Length: 15 m	Pin	RS232	
		1	NC	
		2	RXD	Receive Signal
		3	TxD	Transmit Signal
		4	NC	
		5	GND	Ground
		6	NC	
		7	RTS	Request To Send
		8	CTS	Clear To Send
		9	NC	

Table 6: IF772 RS232 Interface (IF1)

1.1.9 CAN Bus Node Number

Figure 2: IF772 CAN bus node number switch

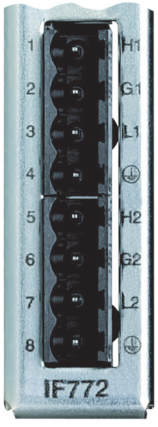
The node numbers for the first CAN bus interface (IF2) is set with the two hex switches. The following formula is used to set the second CAN bus interface (IF3):

Node number CAN bus 2 (IF3) = Node number CAN bus 1 (IF2) + 1

1.1.10 Interfaces CAN Bus 1 and CAN Bus 2 (IF2 and IF3)

Two 120 Ω terminating resistors are included with delivery. The resistors can be installed between pin 1 and pin 3 or between pin 5 and pin 7.

Interface	Description	Pin Assignments	
Application Interface CAN bus 1 + CAN bus 2	The electrically isolated CAN bus interfaces IF2 and IF3 are 8-pin multipoint connectors. The status LED CAN bus 1 or CAN bus 2 are lit when data is sent to the corresponding CAN bus interface. Maximum Transfer Rate: 500 kBit/s bus length: ≤60 m 250 kBit/s bus length: ≤200 m 50 kBit/s bus length: ≤1,000 m	**Terminal**	**CAN bus 1 and CAN bus 2**
		1	CAN_H1
		2	GND1
		3	CAN_L1
		4	Shield 1
		5	CAN_H2
		6	GND2
		7	CAN_L2
		8	Shield 2



8-pin multipoint connector

Table 7: IF772 Interfaces CAN bus 1 and CAN bus 2 (IF2 and IF3)

1.1.11 Firmware

SG3

The IF772 module is not supported.

SG4

The firmware is a component of the PLC operating system of B&R Automation Runtime™. It is loaded to the IF772 module during every restart.