

1.1 IF762

1.1.1 General Information

The IF762 interface module is an aPCI module and can be installed in all corresponding interface module slots (e. g. in the CP360).

The IF762 is equipped with a RS485/RS422 interface and a Profibus DP slave interface and can be used as a slave in a Profibus DP network.

The RS485/RS422 interface is used mostly for visualization and networking based on different protocols (e. g. NET2000).

1.1.2 Order Data

Model Number	Short Description	Image
	Interface Module	
3IF762.9	aPCI interface module, 1 Profibus DP interface, electrically isolated and network capable, 1 RS485/422 interface, electrically isolated and network capable	
	Optional Accessory	
0G1000.00-090	Bus connector, RS485, for profibus networks, remote I/O	
0AC916.9	Bus termination, RS485, active, for Profibus networks, remote I/O, standard mounting rail installation, supply voltage: 120 / 230 VAC	

Table 1: IF762 order data

1.1.3 Technical Data

Product ID	IF762
Short Description	
Communication Module	1 x RS485/RS422, 1 x Profibus DP Slave
interfaces	
Interface IF1 Type Design Maximum Transfer Rate	RS485/RS422 9-pin DSUB socket 115.2 kBit/sec
Interface IF2 Fieldbus Type Design Maximum Transfer Rate	Profibus DP Slave RS485 9-pin DSUB socket 12 MBit/s
General Information	
Status Display	Send/receive data via interface
Diagnostics Data Transfer	Yes, with status LEDs
Electrical Isolation PLC - IFx IF1 - IF2	Yes Yes
Power Input 3.3 V 5 V Total	0.15 W 1.29 W 1.44 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)

Table 2: IF762 technical data

1.1.4 Additional Technical Data

Product ID	IF762
Interface IF1, RS485/RS422	
Controller	UART Type 16C550 compatible
FIFO	16 bytes in send and receive direction
Maximum Distance	1200 m
Network Capable	Yes
Bus Termination Resistor	External T-connector (0G1000.00-090)

Table 3: IF762 additional technical data

Product ID	IF762
IF2 interface, profibus DP slave	
Controller	ASIC SPC3
RAM	1.5 KB
Maximum Distance	1000 m
Maximum Transfer Rate	
Bus Length <100 m	12 MBit/s
Bus Length <200 m	1.5 MBit/s
Bus Length <400 m	500 kBit/sec
Bus Length <1,000 m	187.5 kBit/sec
Network Capable	Yes
Bus Termination Resistor	External T-connector (0G1000.00-090)

Table 3: IF762 additional technical data (cont.)

1.1.5 Operational and Connection Elements

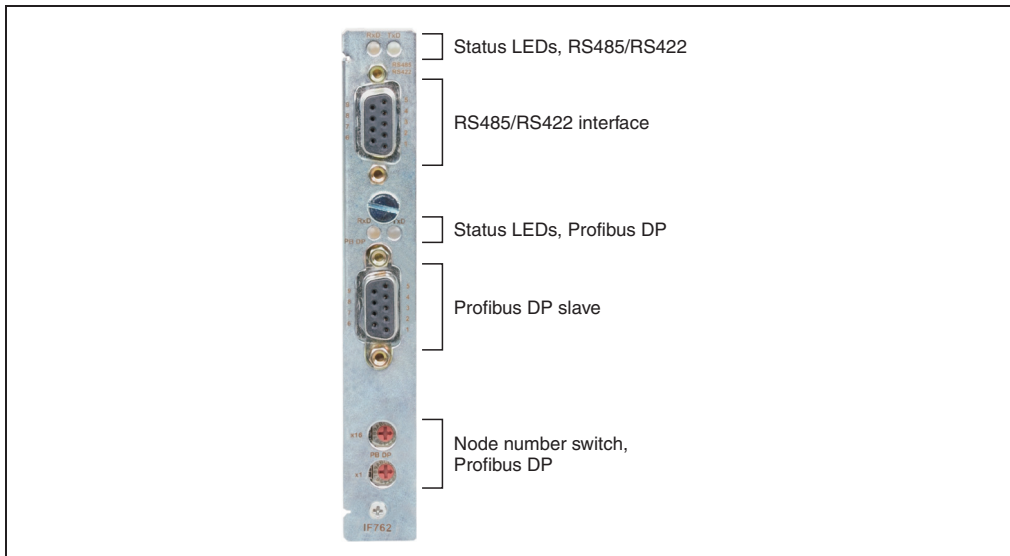


Figure 1: IF762 operational and connection elements

1.1.6 Status Display, RS485/RS422 Interface

Image	LED	Color	Description
	RXD	Orange	The module receives data via the RS485/RS422 interface.
	TxD	Orange	The module sends data via the RS485/RS422 interface.

Table 4: IF762 status display RS485/RS422 interface

1.1.7 Status Display, Profibus DP Slave Interface

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

Table 5: IF762 status display Profibus DP slave interface

1.1.8 RS485/RS422 Interface (IF1)

Interface	Description	Pin Assignments		
Application Interface RS485/RS422  9-pin DSUB socket	The RS485/RS422 interface is electrically isolated. LEDs show on the interface whether data is being received (Rx) or sent (Tx). The shield is connected to the DSUB socket's housing. Maximum Transfer Rate: 115.2 kBit/s Max. cable length: 1200 m	Pin	RS485	RS422
		1	Reserved	Reserved
		2	Reserved	TxD ¹⁾
		3	DATA	RXD
		4	Reserved	Reserved
		5	GND	GND
		6	+5 V / 50 mA	+5 V / 50 mA
		7	Reserved	TxD ¹⁾
		8	DATA\	RxD\
		9	Reserved	Reserved

Table 6: IF762 RS485/RS422 interface (IF1)

1) RS422 send data is TRISTATE capable.

1.1.9 Profibus DP Slave Node Number

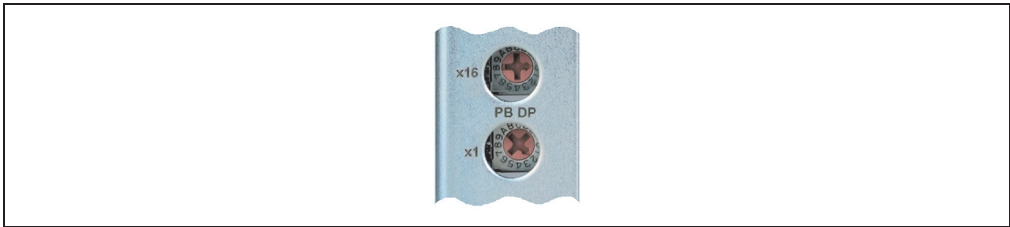


Figure 2: IF762 Profibus DP slave node number switch

The node numbers for the Profibus DP Slave interface (IF2) is set with the two hex switches.

1.1.10 Profibus DP Slave Interface (IF2)

Interface	Description	Pin Assignments																				
Application Interface Profibus DP Slave  9-pin DSUB socket	The electrically isolated RS485 interface is used for coupling to a Profibus DP slave network. LEDs show on the interface whether data is being received (RxD) or sent (TxD). The shield is connected to the DSUB socket's housing. Maximum Transfer Rate: 12 MBit/s	<table><tr><th>Pin</th><th>RS485</th></tr><tr><td>1</td><td>Reserved</td></tr><tr><td>2</td><td>Reserved</td></tr><tr><td>3</td><td>RxD/TxD-P</td></tr><tr><td>4</td><td>CNTR-P</td></tr><tr><td>5</td><td>DGND</td></tr><tr><td>6</td><td>VP</td></tr><tr><td>7</td><td>Reserved</td></tr><tr><td>8</td><td>RxD/TxD-N</td></tr><tr><td>9</td><td>CNTR-N</td></tr></table>	Pin	RS485	1	Reserved	2	Reserved	3	RxD/TxD-P	4	CNTR-P	5	DGND	6	VP	7	Reserved	8	RxD/TxD-N	9	CNTR-N
	Pin	RS485																				
	1	Reserved																				
	2	Reserved																				
	3	RxD/TxD-P																				
	4	CNTR-P																				
	5	DGND																				
	6	VP																				
	7	Reserved																				
	8	RxD/TxD-N																				
9	CNTR-N																					
CNTR ... Directional switch for external repeater																						

Table 7: IF762 Profibus DP slave interface (IF2)

1.1.11 Firmware

SG3

The IF762 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 IF762 module during every restart.

