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Network Interface Card

BIDP 170M

IDENTIFICATION SYSTEMS

REFERENCES

Generic references: BIDP170M## for 2 channels.
 Depending on the tag the card can exchange data with on the corresponding channel a specific firmware is implemented; it is defined by the suffix #, e.g. BIDP170MAA is designed for OMA tags reading/writing on both channels.

GENERAL FEATURES

Authorized slave interface for **Profibus® DP-V1** (Ident-Number = 08E9HEX).
 It handles up to **two independent R/W channels** (both simultaneously read / write data from / to Balogh tags); the channels may differ from each other in tags type.

Communications occur over an RS-485 link (twisted shielded pair).

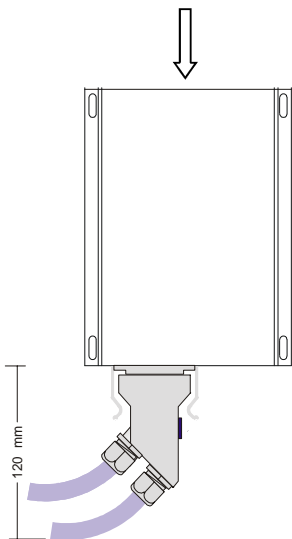
Each BIDP is assumed as a I/O module exchanging data with a class-1 master:

- in acyclic mode, it receives requests and retrieves / sends the tag data (up to 16 Kbytes per request),
- in cyclic mode, it transmits both channel statuses.

It is driven by the FS-S7M functional block for a Siemens Series-7 PLC type 3xx ou 4xx (Step 7 ® shell).

The functional block is delivered on a CD.

DATA FOR ASSEMBLY



Field mount enclosure.
 Vertical mounting preferable,
 connectors flange downwards.

Use the 130°-angled Y-tap (ref: 495XXB4469),
 fitted with two PG11 stuffing boxes and
 a push-pull lock

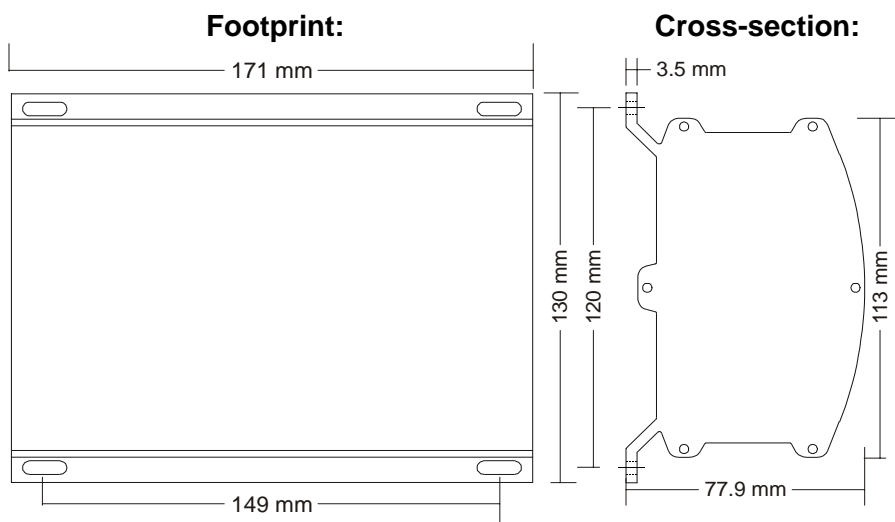
(required clearance: ca. 120 mm).

view of the upper flange bearing the indicator lights:



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four oblong holes
 4.5x14.5 mm are drilled
 for enclosure mounting:



CHARACTERISTICS

	Parameters	MIN	Nominal	MAX	Units
General	Ambient temperature	0		55	°C
	Protection rating		IP 65		-
	Enclosure		Aluminium, PA12 (30%GF)		-
	Weight		1,200		g
Electrical	Supply direct voltage (ripple included)	21	24	29	V
	Protection against polarity reversal		yes		-
	Current consumption (add that of R/W heads) @24VDC			120	mA
Network	Slave number	0		125	-
	Baud rate (auto adaptable)	9.6		12,000	kbauds

CONNECTIONS

Pin nr	Descr.	Use
8	A	RS-485
3	B	
4	RTS	
5	DGnd	
6	VP+5V	generated by BIDP at the end

Voltage	Pin nr
+ 24VDC	1
nc	2, 3
0V	4

Pin nr	1	2	3	4	5
Description	Ucc	Output from head	Input into head	0V	nc

Connection: M12 sockets are keyed (A-coding); cordsets are described in the Accessories data sheet.
 Power supply (male M12 socket): no shield.
 Network (Sub-D): comply with the Profibus-DP cabling guidelines.
 R/W heads (female M12 sockets): refer to the head data sheet for cable requirements:

- cables with overall shield: the overall shield must compulsorily be in contact over 360° to the metallic cable connector housing;
- cables with overall shield + shielded pairs: the overall shield must compulsorily be in contact over 360° to the metallic cable connector housing, while the pair shields are connected to pin 5 (optional);
- cables with shielded pairs, without overall shield: the pair shields must be connected to the metallic cable connector housing.

INDICATOR LIGHTS

The "24V" led indicates the power supply is ON.
 Three leds monitor the activity of each channel: Error, Presence, Execution in progress.
 The bicoloured "Status DP" led indicates whether the BIDP can communicate with the network master.
 The last led is only for maintenance.