Product Information

Periphery module PM DI16
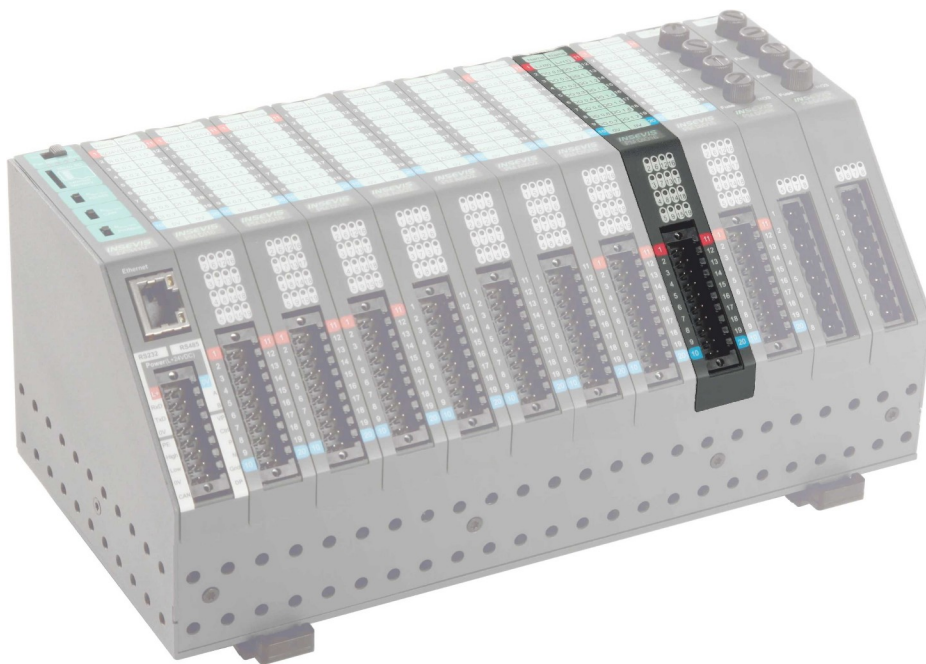
(valid from 06/2012)

compact periphery module for 16 digital inputs 24V

- green diagnostic LED for each input

- insertion stripe with description field for every signal

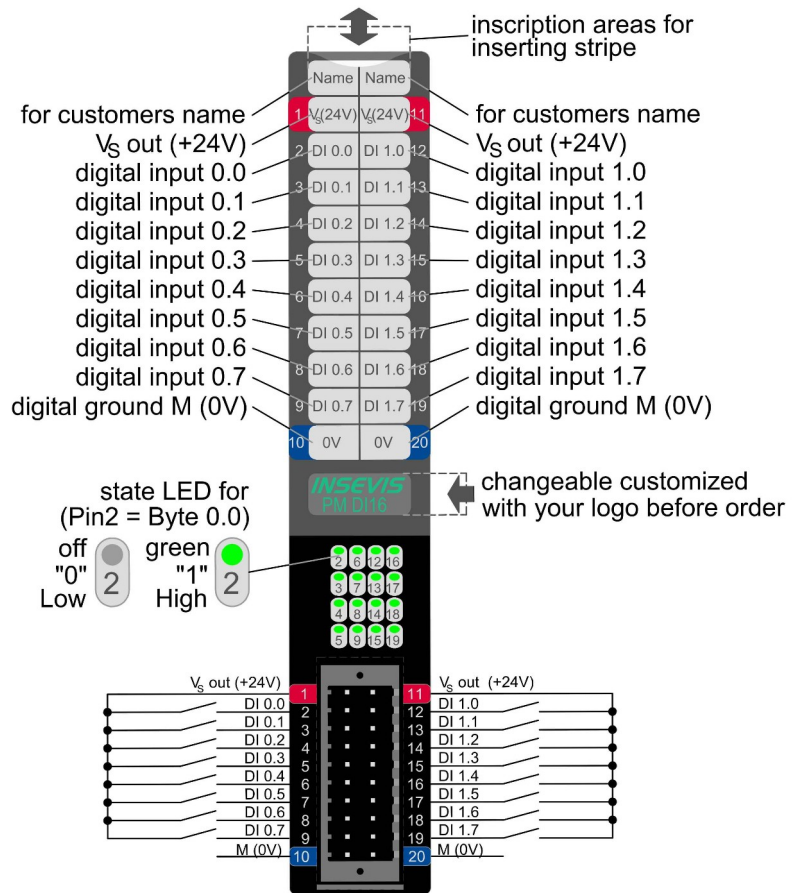- cage-clamp connector with bolt flanges on side

inscription areas for inserting stripe

for customers name	for customers name
V_S out (+24V)	V_S out (+24V)
digital input 0.0	digital input 1.0
digital input 0.1	digital input 1.1
digital input 0.2	digital input 1.2
digital input 0.3	digital input 1.3
digital input 0.4	digital input 1.4
digital input 0.5	digital input 1.5
digital input 0.6	digital input 1.6
digital input 0.7	digital input 1.7
digital ground M (0V)	digital ground M (0V)

Name	Name
1 V_S(24V)	V_S(24V) 11
2 DI 0.0	DI 1.0 12
3 DI 0.1	DI 1.1 13
4 DI 0.2	DI 1.2 14
5 DI 0.3	DI 1.3 15
6 DI 0.4	DI 1.4 16
7 DI 0.5	DI 1.5 17
8 DI 0.6	DI 1.6 18
9 DI 0.7	DI 1.7 19
10 0V	0V 20

state LED for (Pin2 = Byte 0.0)

off "0" Low   2   green "1" High   2

changeable customized with your logo before order

V_S out (+24V) V_S out (+24V)

DI 0.0	1	11	DI 1.0
DI 0.1	2	12	DI 1.1
DI 0.2	3	13	DI 1.2
DI 0.3	4	14	DI 1.3
DI 0.4	5	15	DI 1.4
DI 0.5	6	16	DI 1.5
DI 0.6	7	17	DI 1.6
DI 0.7	8	18	DI 1.7
	9	19	
M (0V)	10	20	M (0V)

Figure above: Description and wiring of all connections of periphery module DI16

DI16

1, 11   L+   DI(0..15)   2..9, 12..19

15k Ohm

Back-plane

M   10, 20
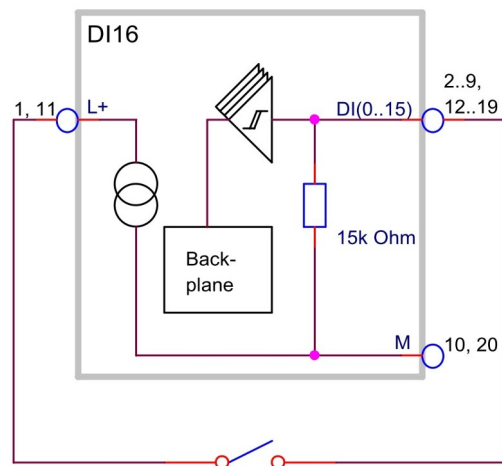
Figure above: Block diagram of DI16 for 2 wire swiches

Input

Start address:		0
End address:		1

Output

Start address:		0
End address:		0

Figure above: Configuration block of start-/ end addresses of DI16-inputs (in byte) in the ConfigStage

Description | Application with 3- / 4-wire switches

compact periphery module for 16 digital inputs 24V

- green diagnostic LED for each input

- insertion stripe with description field for every signal

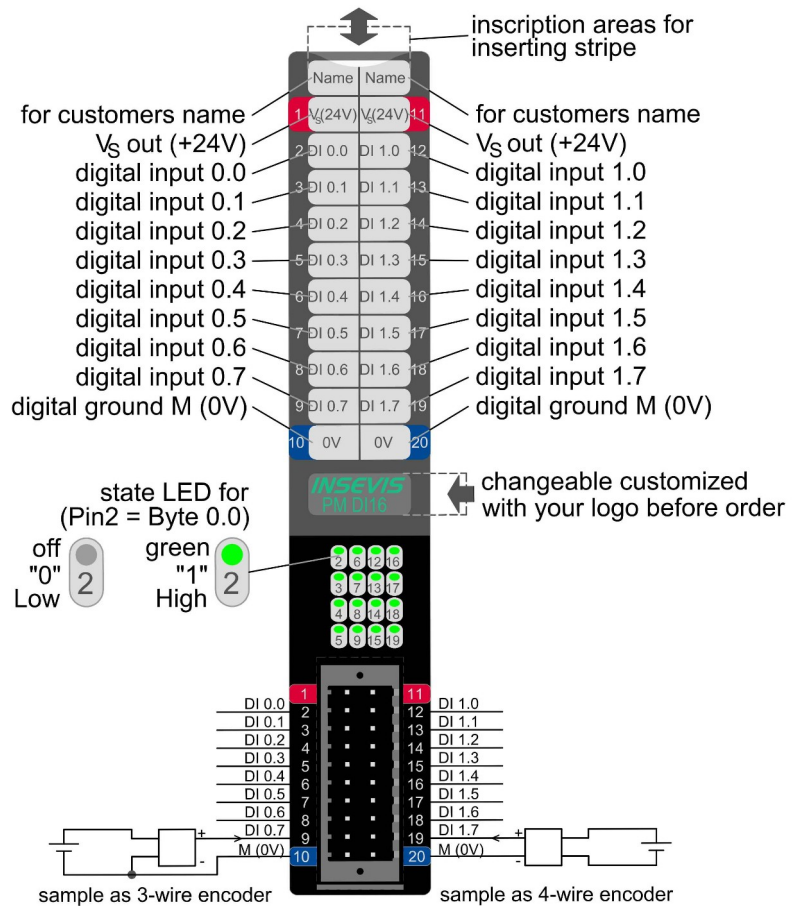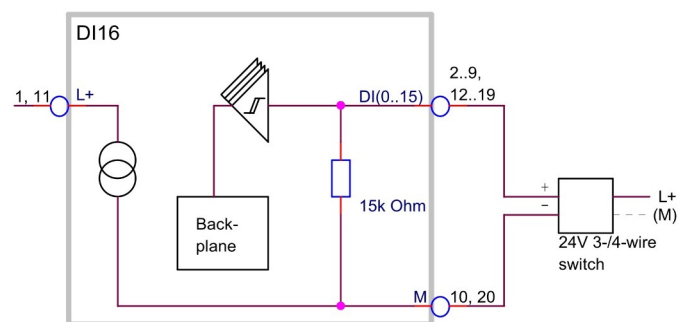- cage-clamp connector with bolt flanges on side

inscription areas for inserting stripe

for customers name
V_S out (+24V)
digital input 0.0
digital input 0.1
digital input 0.2
digital input 0.3
digital input 0.4
digital input 0.5
digital input 0.6
digital input 0.7
digital ground M (0V)

for customers name
V_S out (+24V)
digital input 1.0
digital input 1.1
digital input 1.2
digital input 1.3
digital input 1.4
digital input 1.5
digital input 1.6
digital input 1.7
digital ground M (0V)

state LED for
(Pin2 = Byte 0.0)

off "0" Low — green "1" High

changeable customized with your logo before order

DI 0.0 / DI 1.0
DI 0.1 / DI 1.1
DI 0.2 / DI 1.2
DI 0.3 / DI 1.3
DI 0.4 / DI 1.4
DI 0.5 / DI 1.5
DI 0.6 / DI 1.6
DI 0.7 / DI 1.7
M (0V) / M (0V)

sample as 3-wire encoder   sample as 4-wire encoder

Figure above: Description and wiring of all connections of periphery module DI16

DI16

1, 11 L+
DI(0..15)
2..9, 12..19
15k Ohm
Back-plane
M 10, 20
24V 3-/4-wire switch
L+ (M)

left: Block diagram of DI16 for 3- and 4-wire switches

Input

Start address: 0
End address: 1

Output

Start address: 0
End address: 0

left: Configuration block of start-/ end addresses of DI16-inputs (in byte) in the ConfigStage

Technical data

Dimensions W x H x D (mm) Weight	20 x 108 x 70 mm ca. 150 g
Operating temperature range Storage temperature range Relative humidity	-20°C ... +60°C (without condensation) -30°C ... +80°C up to 96% (without condensation)
Connection technology	connector with cage clamp technology for cross section up to max. 1,5mm^2
IP-protection class Vibrations	IP41 Frequency range 2 -100Hz, amplitude 1mm peak < 13,2Hz acceleration 0,7g >13,2Hz
Sensor supply Load voltage L+	short circuit proof output, current limited to 30 mA (typ.) 24V DC (11V ... 30V DC, is connected by device supply)
Wire length unshielded (max.) shielded (max.)	30 m 100 m
Digital inputs Diagnostic LEDs	16 16, green
Input voltage for signal 0 for signal 1	0V ... +5 V +10,5V ... +30 V
Input current for signal 1	1 mA
Broken wire detection Potential separation to PLC Access of 2-wire-BERO	no no no
Switch on delay Switch off delay Sampling cycle time	90 µs (typ.) 1,4 ms (typ.) as onboard module on the PLC = cycle synchronous

Ordering data module

Identification	Order-no.	Packaging unit
Periphery module **DI16**	PM-DI16-02	PU: 1 piece
Connector 2x10pin with pin markings and bolt flanges on side	E-CONS20D-00	PU: 1 piece

Qualified personnel
All devices described in this manual may only be used, built up and operated together with this documentation. Installation, initiation and operation of these devices might only be done by instructed personnel with certified skills, who can prove their ability to install and initiate electrical and mechanical devices, systems and current circuits in a generally accepted and admitted standard.

Manuals, sample programs
Additional documentation by manuals is available as well sample applications at the download area of www.insevis.com in English language for free download.

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All technical details in this documentation were created by INSEVIS with highest diligence. Anyhow mistakes could not be excluded, so no responsibility is taken by INSEVIS for the complete correctness of this information. This documentation will reviewed regularly and necessary corrections will be done in next version. With publication of this data all other versions are no longer valid.

Disposal
Do not throw old appliances in the household waste! In the interest of environmental protection, old appliances must be collected separately from unsorted municipal waste. You can find out more about the proper disposal / return of your old appliance at www.insevis.com/disposal. Attention: The deletion of personal data on the old devices to be disposed of is the responsibility of the end user.

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