EMITTER ELECTRONICS
innovative · reliable · flexible

DIGITAL PRESSURE INDICATOR

DPI-XXXX / RPI / DPG-XXXX

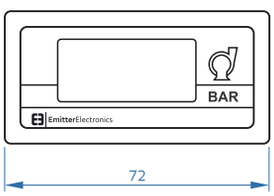
Features and Benefits

1. **Vacuum. Low and High Pressure Indication**
2. **3-Digit [BAR] or 4-Digit [kPa] Display Version**
3. **I/O Driver integrated for Alarms, Regulation, Etc. - Optional**
4. **CAN Bus Or One Wire Datalink**
5. **Super Bright LED Display**
6. **Multiple Sensor input**

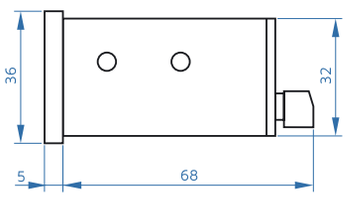
DPI types of Digital Pressure Indicators are designed to display system pressure using 3 or 4-digit ultra-bright LED display where multiple pressure sensors can be connected. The unit standardly uses a -1..24 bar, 0..25 bar and 0..60 bar pressure sensors. The sensor input is widely configurable and it can be used for 0.5-4.5 V and 0-10 V transducers or 4-20 mA transmitters.

V1.0-190915

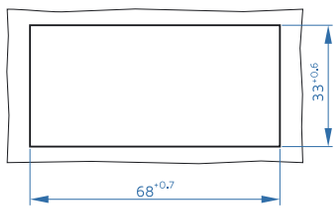
FRONT VIEW



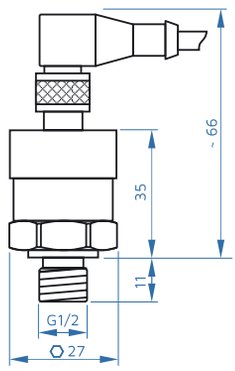
SIDE VIEW



PANEL CUT-OUT



PRESSURE SENSOR
S-PT06



Optional I/O driver can be integrated for activating warning output, regulating the system pressure, etc.

The Digital Pressure Indicator can be used as a stand-alone system or as a part of MMX system connected via CAN bus to IO Controller. Several slave-remote pressure indicators (RPI) can be connected to a master indicator DPI to show the same value on different locations.

Connection

CONNECTION standard device

PIN	DESCRIPTION
1	BATTERY + (“15”)
2	BATTERY -
3	OUT1 (OPTIONAL)
4	T-COMMUNICATION
5	SENSOR [V] GND
6	SENSOR [V]/[mA] SIGNAL
7	SENSOR [V]/[mA] VCC+
8	OUT2 (OPTIONAL)
9	OUT3 (OPTIONAL)
10	OUT4 (OPTIONAL)
11	OUT5 (OPTIONAL)
12	OUT6 (OPTIONAL)
13	OUT7 (OPTIONAL)

CONNECTION CAN bus device

PIN	DESCRIPTION
1	BATTERY + (“15”) / SENSOR SUPPLY (OPTIONAL)
2	BATTERY - / SENSOR GND (OPTIONAL)
3	OUT1 (OPTIONAL)
4	T-COMMUNICATION / OUT3 (OPTIONAL)
5	IN1
6	SENSOR [V]/[mA] SIGNAL
7	OUT2 (OPTIONAL)
8	SENSOR [V]/[mA] VCC+ / OUT4 (OPTIONAL)
9	OUT5 (OPTIONAL)
10	SENSOR [V] GND / OUT6 (OPTIONAL)
11	OUT7 (OPTIONAL)
12	CAN L
13	CAN H

Transducer-OEM

SPECIFICATION AND CONNECTION	
Pressure Range	Vacuum -1..24 bar, Low 0..25 bar, High 0..60 bar
Signal Output	0.5-4.5 V or 4-20 mA
IP Class (IEC529)	IP67
Transducer Material	Stainless steel 316L
Pressure Port	1/4”
Transducer Cable	3 x 0.35 mm2 with M12 connector
M12 Connection	1:Ub, 3:GND, 4:Signal+

Specifications

POWER	
Supply Voltage	9-30 V DC
Current	0.5 A maximum, no outputs active
Electrical Protection	overvoltage, transients, reverse polarity
INTERFACES	
CAN	1 x CAN, optional
CAN termination	120 ohm, solder pad on PCB
Serial communication	1 x T (1 Wire), optional
I/O	
Sensor input	0.5-4.5 V Standardly, 0-5V, 0-10V, 4-20 mA
Digital Input	GND, only with CAN bus device
Digital Output OUT1 OUT2 OUT3-OUT7	**Only version with integrated I/O driver* positive switching (relay), max. 6 A (Low water warning) positive switching (relay), max. 1.5 A (Autofill-Hysteresis) negative switching (low-side), max. 1.8 A
Loads	inductive, resistive

ENVIRONMENT	
IP Class (IEC529)	front panel IP67, back IP20
EMC Conformity	EN61000-6-2 noise immunity EN61000-6·4 radiation of interference
Temperature Range	storage -40° to +85°C (-40° to 185°F) operating -40° to +85°C (-40° to 185°F)
ENCLOSURE	
Housing Material	NORYL with glass-fibre reinforcement
Mounting	in-dash, with clips or springs
Connector	Terminal block 4, 8 or 13 way depending on selected options
MISCELLANEOUS	
LED display	3 digit (bar) or 4 digit (kPa)
Reading resolution	@P<30 bar: 0.1 bar (10 kPa), @P>30 bar: 1 bar
SIZE AND WEIGHT	
W x H X D	36 x 72 x 68 mm with connector
Weight	0.1 kg

How to order (use characters in **bold** to create order code)

SET of DPI - master Indicator, pressure sensor, sensor cable

Ordering code example:

D	P	G	-	0	0	2	5	T	-	0	5	R	R	

MEASURING RANGE **0024**: -1 .. 24 BARS **0025**: 0 .. 25 BARS **0060**: 0 .. 60 BARS **2200**: 0 .. 2200 KPA	**T**: 1 WIRE **C**: CAN BUS		CABLE LENGTH, METERS (INCH) **05**: 5 M (20”) **10**: 10 M (40”) **15**: 15 M (60”)	OUT1 **R**: OUTPUT 1	OUT2 **H**: HYSTERESIS **R**: ADD. OUTPUT	SPECIAL MODIFICATION

Remote Indicator

Ordering code example:

R	P	I	-	B	T	I	R	R	

UNITS: **B**: BAR **P**: KPA	**T**: 1 WIRE **C**: CAN BUS	LED BRIGHTNESS **I**: INSIDE **O**: OUTSIDE	OUT1 **R**: OUTPUT 1	OUT2 **H**: HYSTERESIS **R**: ADD. OUTPUT

Master Indicator

Ordering code example:

D	P	I	-	0	0	2	5	I	2	T	R	R	

MEASURING RANGE **0024**: -1 .. 24 BARS **0025**: 0 .. 25 BARS **0060**: 0 .. 60 BARS **2200**: 0 .. 2200 KPA	SENSOR INPUT / PROBE **U4**: 0,5-4,5V **U1**: 0-10 V **I2**: 4-20 MA	**T**: 1 WIRE **C**: CAN BUS	OUT1 **R**: OUTPUT 1	OUT2 **H**: HYSTERESIS **R**: ADD. OUTPUT	SPECIAL MODIFICATION

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