

# PD 620 DPI 4-Channel Digital IO

## PD Series 600



### The PD 620 is a module included in the Series 600 modules and features:

- Individually configurable digital I/Os for nominal 24 volts signals and 1 Amp (2 Amp) loads
- Built in input and output functions
- Autonomous counting to 200 Hz
- Load current measurement
- Input voltage measurement and scaling
- Overload/Underload protection and alarming
- Advanced internal self testing
- Wide power supply range
- 2 LEDs for power on and error indication
- 1 LED for each digital channel

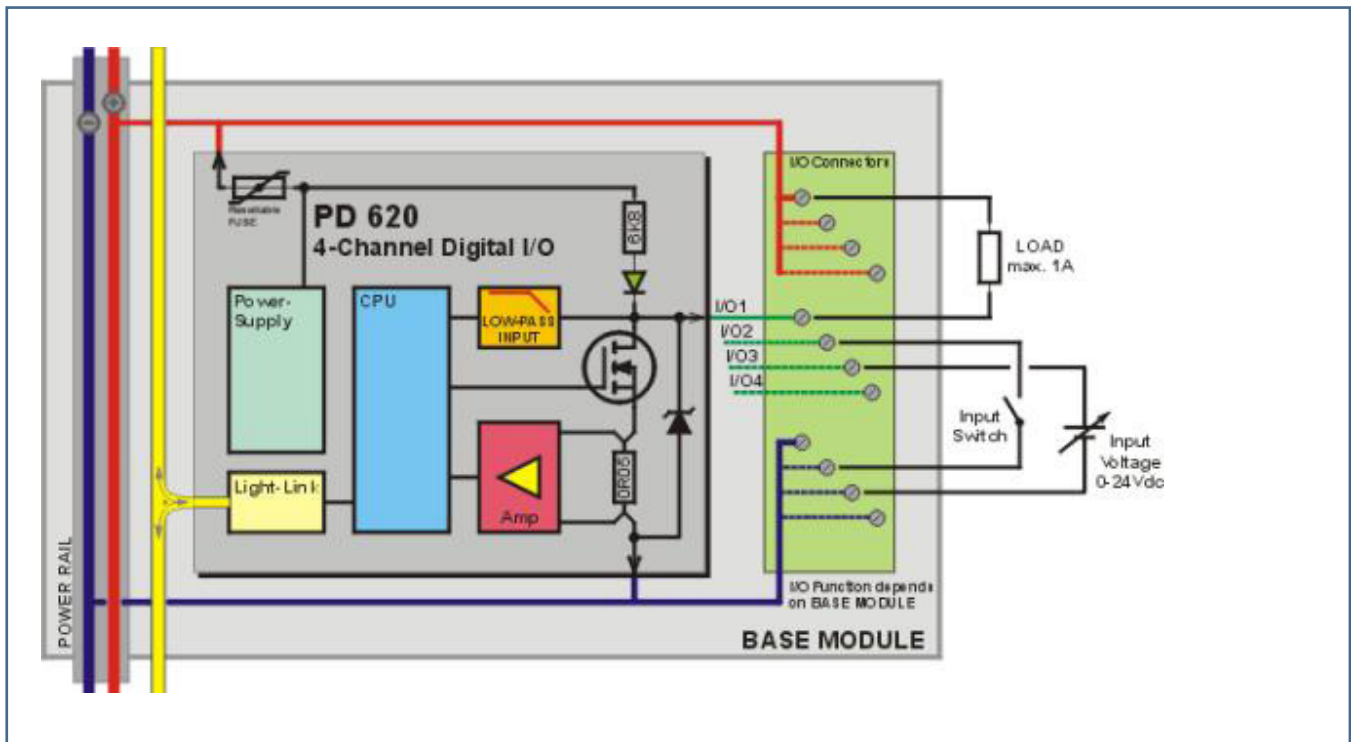
## Introduction

The PD 620 has four independent digital channels capable of being configured for input or output. Each channel is also capable of measuring a scaled voltage input, and can therefore be used as an analogue input device. It can be used with the

BM 014 (or BM 001) for direct I/O terminals or the BM 008 base module, where four output channels can be used with the four built in relays.

## Block Schematic

The diagram shows the I/O circuits and connection possibilities for a PD 620.



## LED Indicators

Series 600 devices (including slave devices) are equipped with 2 LEDs, a green (On) for indication Power supply, and a red (Error) for indicating errors in the device. Furthermore, there is also one LED for each digital channel.

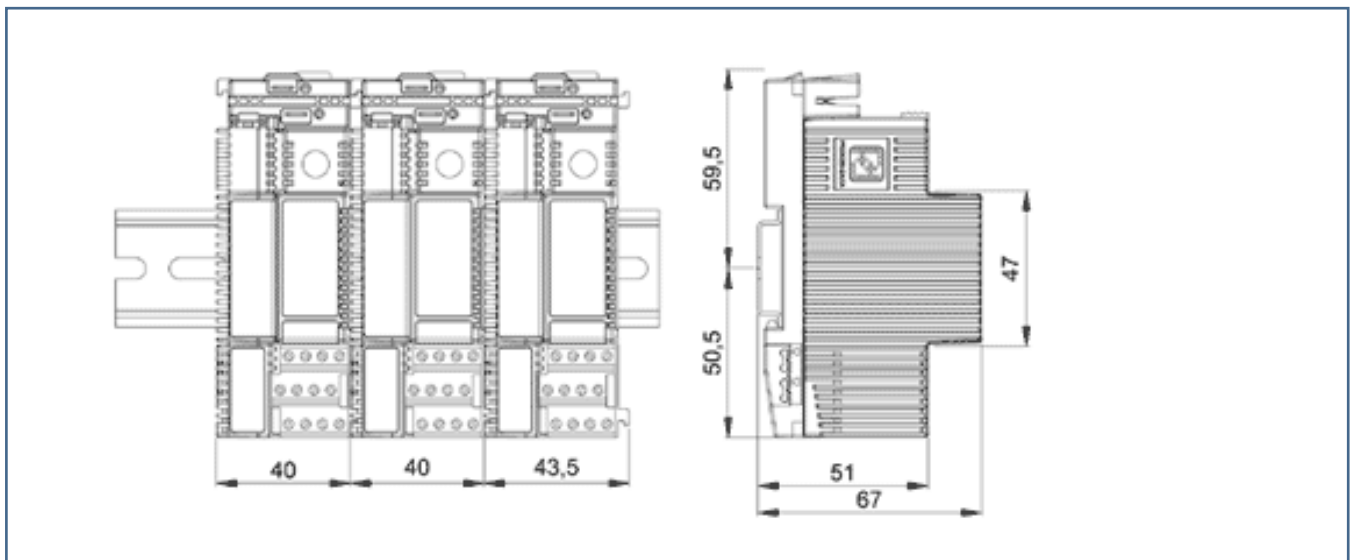
The Error LED is ON if an error occurs inside the device, which causes one of the error flags to be set to TRUE. This is for example watchdog error or error in EEPROM memory.

## Channel Structure

The PD 620 consists of 5 channels as shown in then table.

Channel		
No.	Name	Description
0	Service	Device identification, adress and configuration
1	Digital IO 1	General purpose Digital Input or Output
2	Digital IO 2	General purpose Digital Input or Output
3	Digital IO 3	General purpose Digital Input or Output
4	Digital IO 4	General purpose Digital Input or Output

## Technical Data

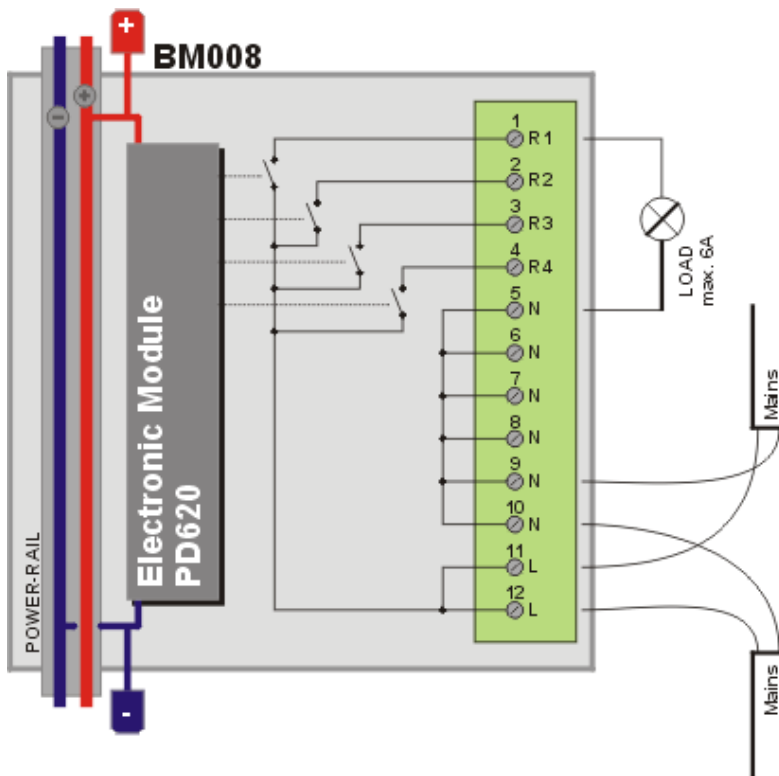
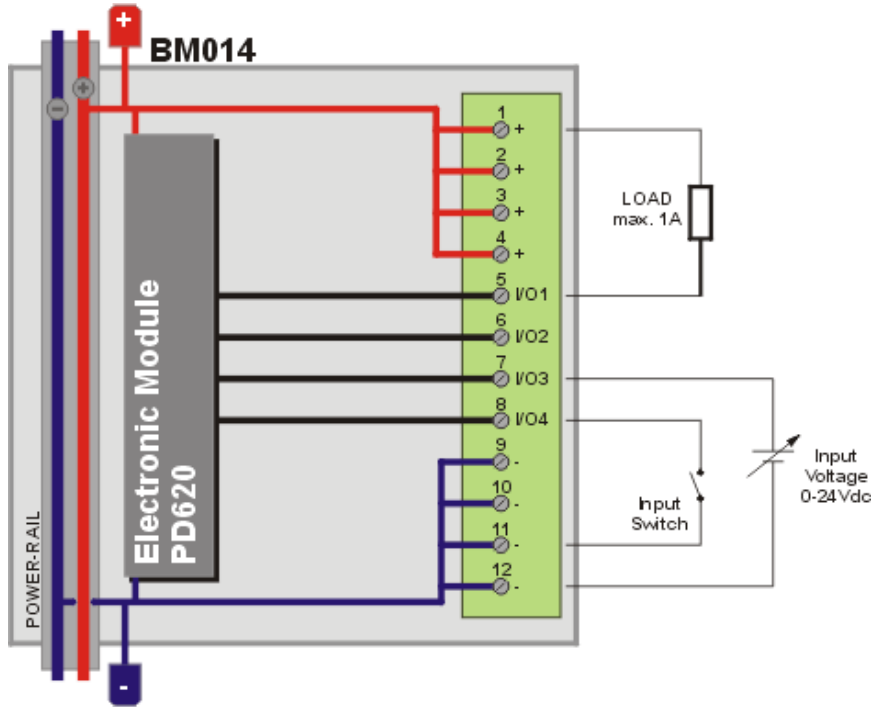


## Technical Specifications

<b>Weight</b>	140 grams approx.
<b>Power supply</b>	18 to 32 VDC
<b>Ripple</b>	max. 5%
<b>Power consumption @ 24VDC</b>	
<b>All outputs / inputs at ON</b>	max. 45 mA
<b>All outputs / inputs at OFF</b>	max. 30 mA
<b>Digital Input</b>	
<b>Input voltage at ON (Sink only)</b>	< 3V
<b>Input voltage at OFF</b>	> 9V
<b>Input hysteresis</b>	min. 0.3 V
<b>Input current at ON</b>	max. 3.4 mA
<b>Short circuit cutoff delay time (Current &gt; 2A)</b>	max. 200 Hz
<b>Digital Output</b>	
<b>Start current (Duration max 2 sec.)</b>	max. 2 A *)
<b>Load current at ON (Sink only)</b>	max. 1 A
<b>Leak current at OFF</b>	max. 500 $\mu$ A
<b>Short circuit cutoff delay time(Current &gt; 2A)</b>	max. 100 $\mu$ sec
<b>Oneshot and dutycycle resolution:</b>	15.625 msec
<b>Load current measurements</b>	
<b>Accuracy</b>	min. 2.5 %, +/- 10 mA
<b>Resolution:</b>	2.4 mA
<b>Repeatability</b>	min. 1 %, +/- 10 mA
<b>Analog Input</b>	
<b>Input voltage</b>	0-11 V
<b>Resolution:</b>	15 mV
<b>Voltage measurement update time</b>	15.625 msec
<b>Operation temperature</b>	-25 °C to + 70 °C
<b>Storage temperature:</b>	-40 °C to + 85 °C
<b>Interface</b>	Light-Link

\*) Enabled by setting MaxCurrent = 2A, and MinMaxCurPreset = 2 seconds.  
By default, MaxCurrent = 1.0 and MinMaxCurTimer = 0.0.

# Wiring Diagrams



Available Base Modules:  
BM 001 - 014<sup>(\*)</sup>

<sup>(\*)</sup>) Recommended

## Maritime Approvals

Meets the requirements of all the major international marine classification societies.

For more information see PDS for the PD Series 600 Introduction.

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