



PoOptoIn

User's manual

v1.0



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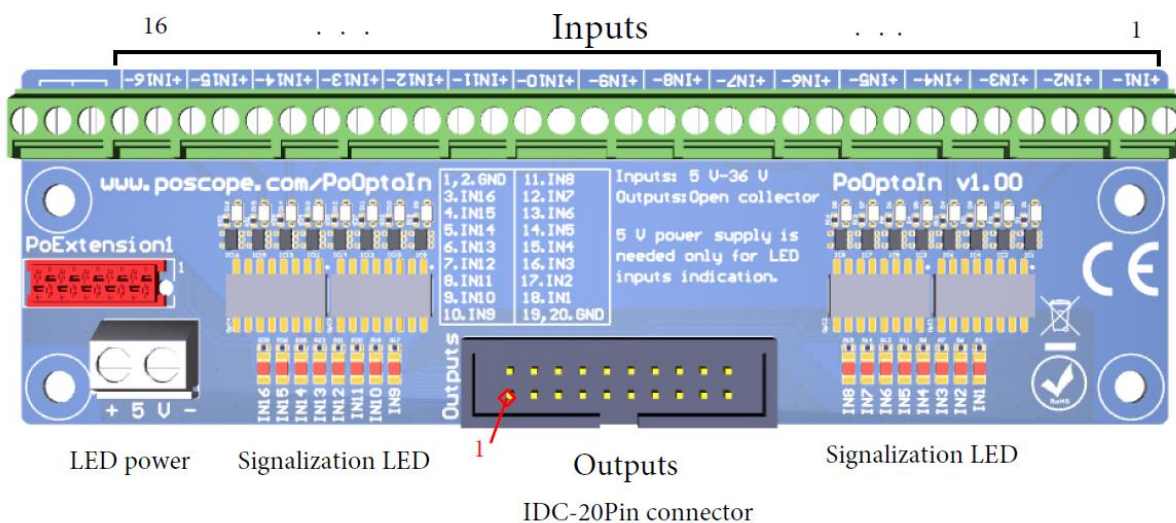
1 Introduction

PoOptoIn is 16-channels industrial digital optical isolator. Thanks to constant current LED driver circuit on input, isolator accepts input voltages from 5 to 24 volts. Digital outputs are open-collector type. Each digital input logic level is signaled with status LED if external 5V is applied to power connector. External 5V voltage is not a condition for PoOptoIn operation! With 20-pin IDC output connector is suitable for use with PoKeys57CNC board or any other microcontroller board.

2 Features

- 16-optical isolated digital outputs
- Recommended input voltages from 5 V to 24 V (Max. 36 V)
- Simple connection to PoKeys57CNC Reference/Limit switch input connector
- Screw terminals on inputs

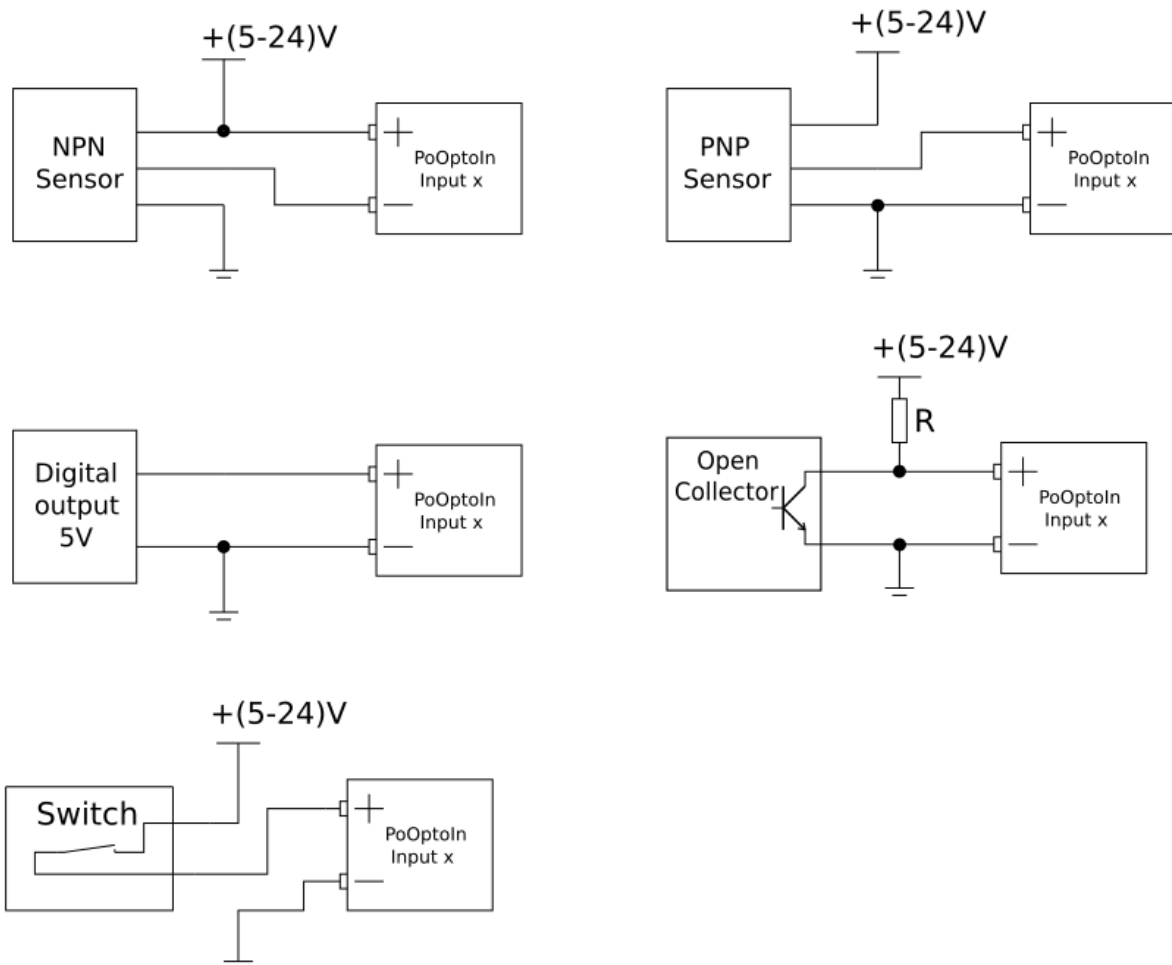
3 Connectors and pinout



4 Usage examples

Each PoOptoIn input contains a serial diode for protection against incorrect wiring. Keep in mind that outputs are open collector. Output logical levels are inverted!

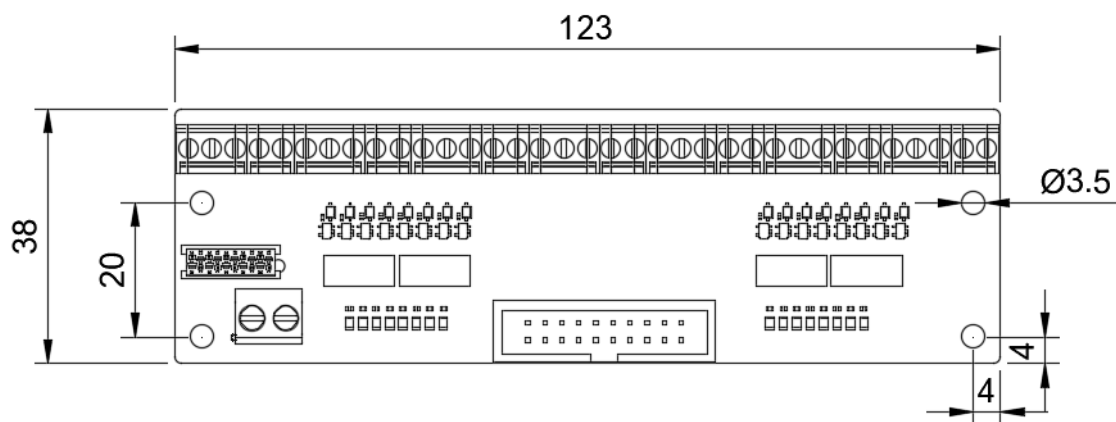
Input voltage level depends on sensor device specification (switch) and should not be supplied from the isolated side!



Connection to: NPN or PNP sensor type; standard 5V digital output, open collector output; ordinary switch

5 Technical specifications

- Recommended input voltage 5-24 V_{DC} (36 V; short time < 1s)
- Isolation voltage 3000 V_{RMS}
- Open collector I_{Cmax} 30 mA
- Switching frequency max 100 kHz
- Working temperature -20 °C ÷ +80 °C
- Weight 40g
- Mechanical dimensions [mm]



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