

## PLC module with 8 digital input + 8 power output

### PLC-8DI-8PO-01

#### Input & outputs:

- 8 digital inputs 5-30 volts
- 8 power outputs (even with inductive loads) up to 2A (max 4A in total)
- 2/10Khz, opto-coupled inputs (usable as-is, or suitable for a quadrature encoder)
- 2 analog inputs 0-10V
- 2 analog outputs 0-10V
- Auxiliary output power supply 12V (13.5V), 200mA stabilized
- USB interface

#### Features of internal PLC with functional and/or procedural programming style:

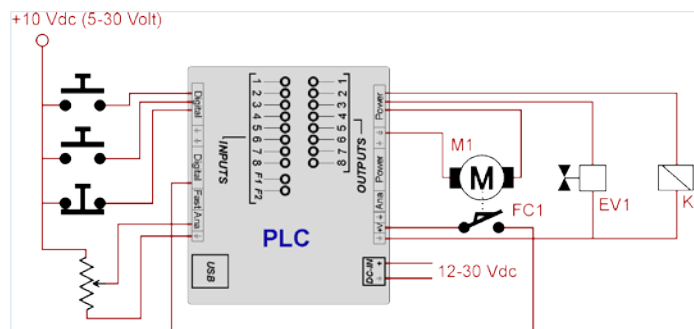
- Max program length, bytes: 4096
- Max program length, contacts: 512
- Max number of concurrent tasks: 16
- Internal relays: 64
- Internal 16 bit integer registers: 64
- Number of timers: 16
- Number of hardware counters: 4



PLC module with power I/O embedded management and USB interface for PC connection

This device can control machinery or other devices with its inputs and outputs @24Vdc, analog I/O (0-10V), encoder interface, and an auxiliary stabilized power supply of 12Vdc.

It can be used in conjunction with a PC, or stand-alone (PLC mode) after having loaded a program (PLC cycle), thanks also to the possibility of designing easily a GUI operator panel.



The device is equipped with an interface module for personal computer (PC) via USB. It lets you to read digital inputs (on/off) with voltages from 5 to 30 volts, and drive power outputs from 12 to 30 volts (nominal 24) with a maximum current of 2A per output (max 4 in total).

Power supply to the module must be given externally and can vary from 12 to 30 volts DC.

In addition to 8 inputs and 8 outputs, there are:

- Two analog inputs 0-10V
- Two analog outputs.
- Two fast and opto-coupled inputs that can be used as-they-are or can be connected to a quadrature encoder.
- One auxiliary stabilized power supply of 12Vdc (+13.5V), with 200mA.

The PLC can be used as a simple slave/interface of the PC, or it can be used in stand-alone mode, just as a PLC; the supplied PC software - a true integrated development environment - is used to write the program, debug, transfer data and store them in the non-volatile memory of the module. Even when running the internal program (PLC cycle), the PLC can communicate with the PC in order to deploy a GUI interface, acquire and store data, or to do complex calculations.

Computer can delegate to the PLC all 'time-critical' operations, and manage only higher level duties.

Input and outputs:

- 8 digital inputs 5-30 volts
- 8 power outputs (even with inductive loads) up to 2A (max 4A in total)
- 2/10Khz, opto-coupled inputs (usable as-is, or suitable for a quadrature encoder)
- 2 analog inputs 0-10V
- 2 analog outputs 0-10V
- Auxiliary output power supply 12V (13.5V), 200mA stabilized
- One USB interface

The communication with the PC

is made with the normal USB interface, using one of two available methods:

- using a DLL (dynamic link library), for high-level computer languages, LabView® included
- using a serial terminal emulation, like a modem, and a simple yet effective set of text commands

PLC features an internal watch-dog to set outputs in a safe state in case of the PC hangs, or in case of hardware failure (the power outputs are monitored and can detect overcurrent and open circuit).

The internal PLC is programmable with a hybrid language, similar to Basic but with some PLC extensions, which allows both functional (Ladder style) and procedural style, even concurrently. Up to 16 tasks can be used together.

