

# **TP8**

## **Interface Modules**

***Opto-Isolated 4A / 8 channel positive  
output transistor interface module***

## TP8 Module key features

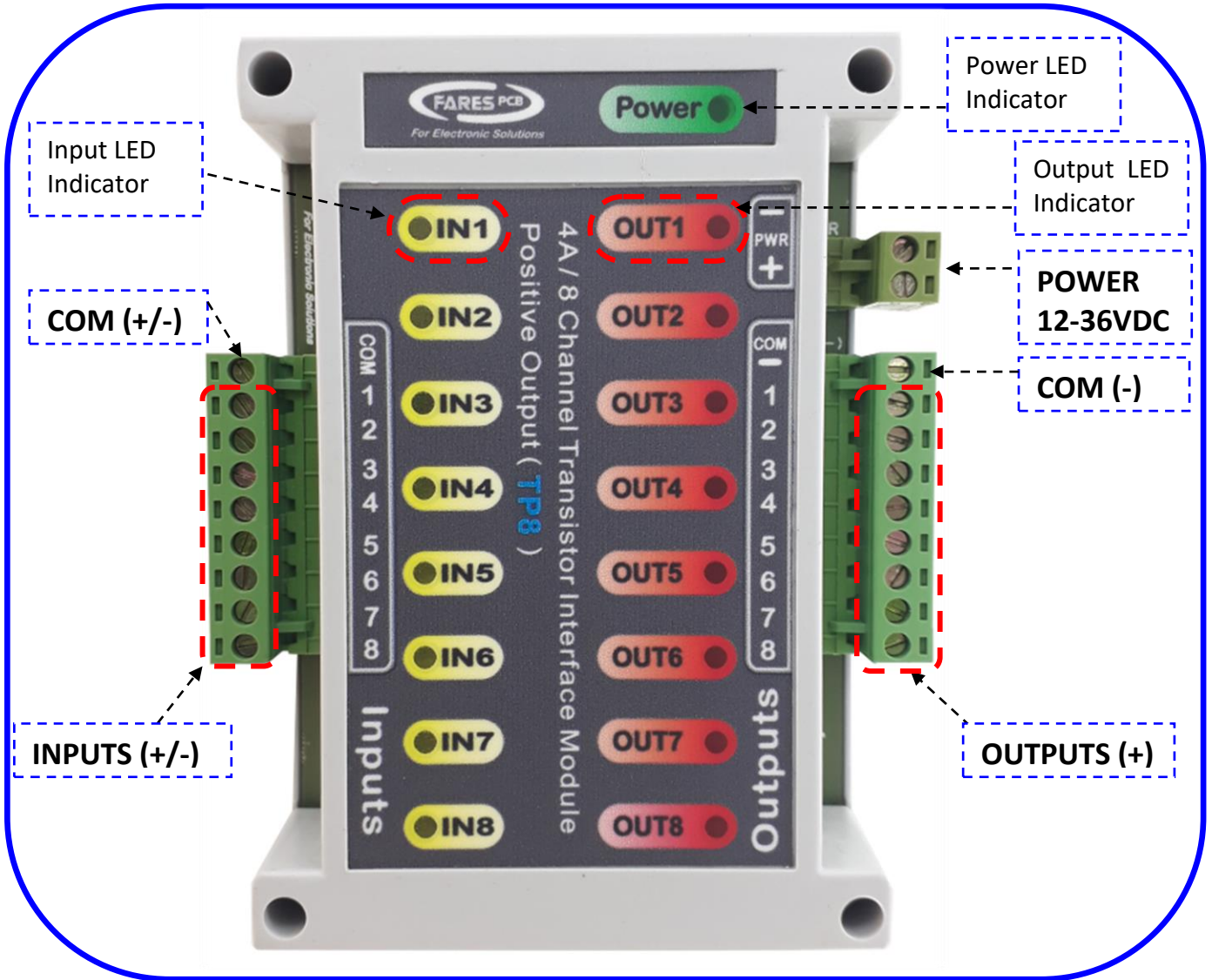
- Input power voltage 12-36 VDC.
- Output current +4A (Continuous) / +15A (Instantaneous).
- 8 output channels (MOSFET transistor).
- Opto-isolated outputs for safety.
- positive or negative input signal.
- Fuse protection for each output.
- Switching frequency 1000Hz.
- Green LED indicator for power input.
- Yellow LED indicator for each input.
- Red LED indicator for each output.
- Standard DIN rail mountable box.

## TP8 Typical applications

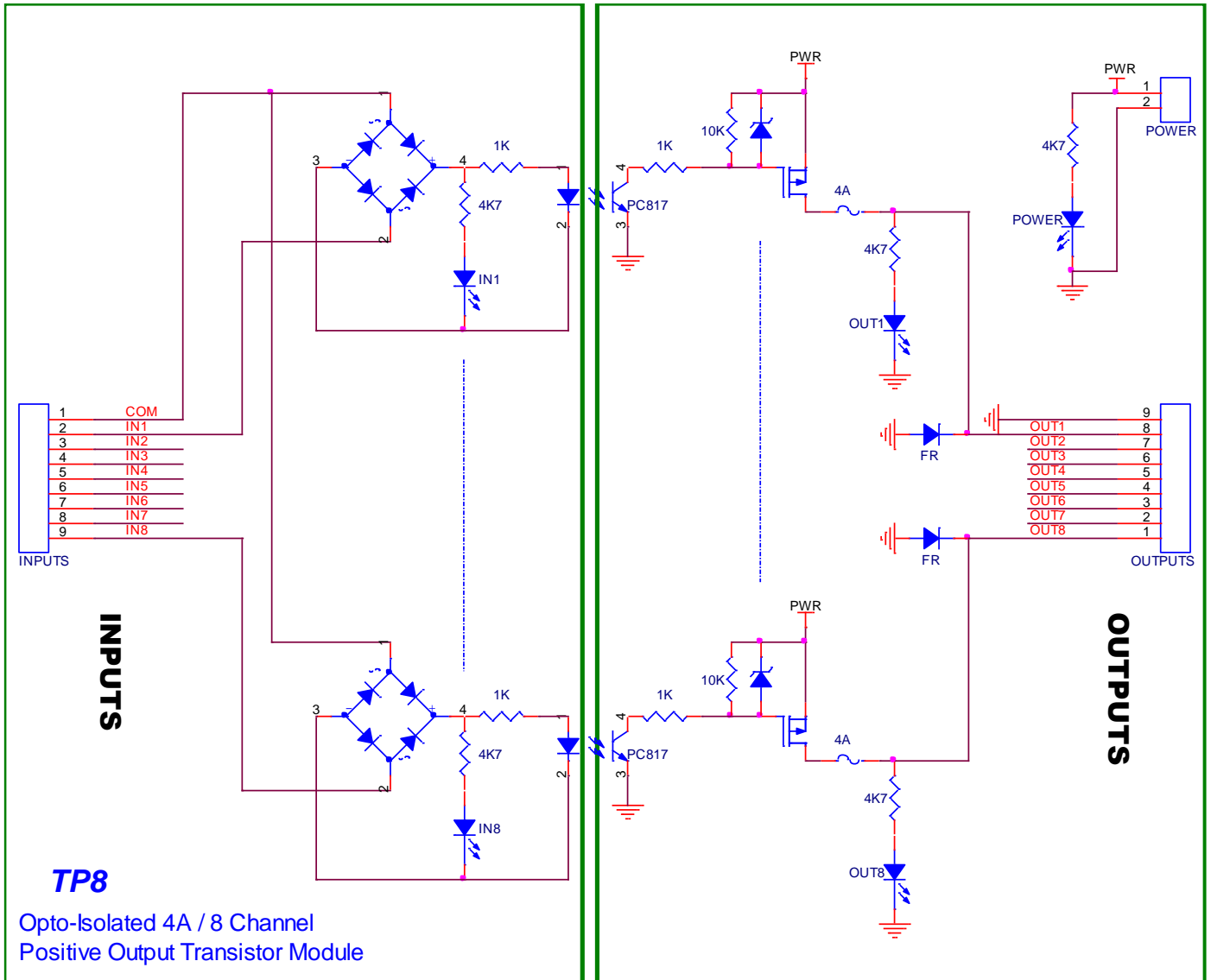
- PLC Control.
- Microcontroller applications.
- Electromagnetic valves.
- DC motor control.
- Home intelligent control systems.

## Technical data

Parameter	Min	Typ	Max	Unit
Model		TP8		-
Output type		Positive (P-FET)		-
Channels		8		-
Input power (Vp)	12	24	36	V
Input signal voltage	5	24	33	V
Input signal current	3	10	34	mA
Output voltage	Vp-2	Vp		V
Output current (continuous)		4		A
Output current (Pulse)	10	15	20	A
Switching frequency			1000	Hz
Dimensions L X W X H		145 x 90 x 41		mm



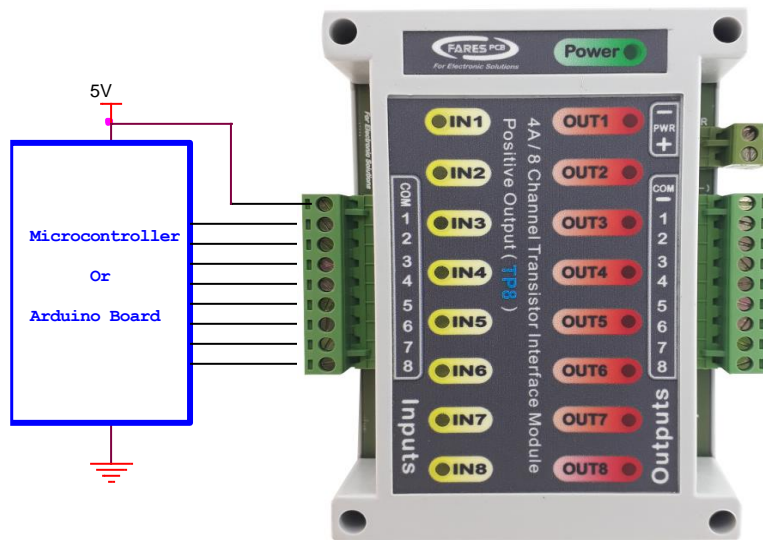
**TP8 Module**



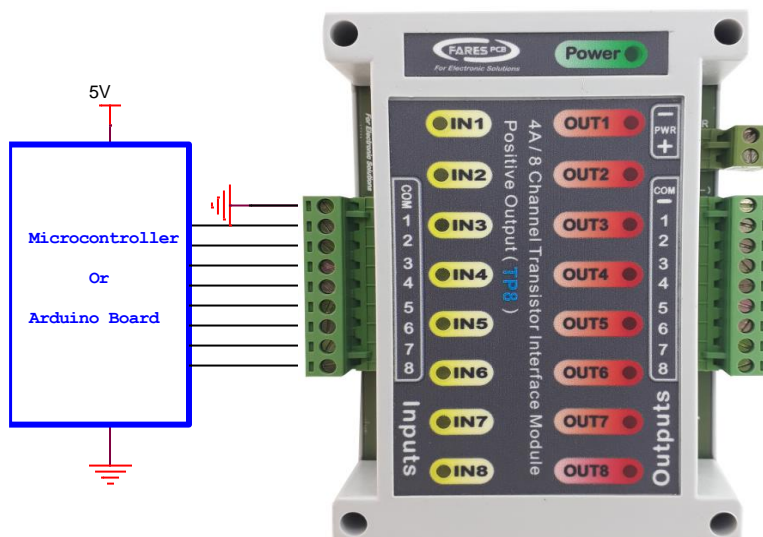
**TP8 (schematic diagram)**

**TP8** Module is divided into two electrically isolated circuits. Input control circuit and output transistors circuit. opto-isolators are used to isolate two circuits for safety requirements and eliminating ground loops.

## Interfacing Microcontroller to TP8 Module

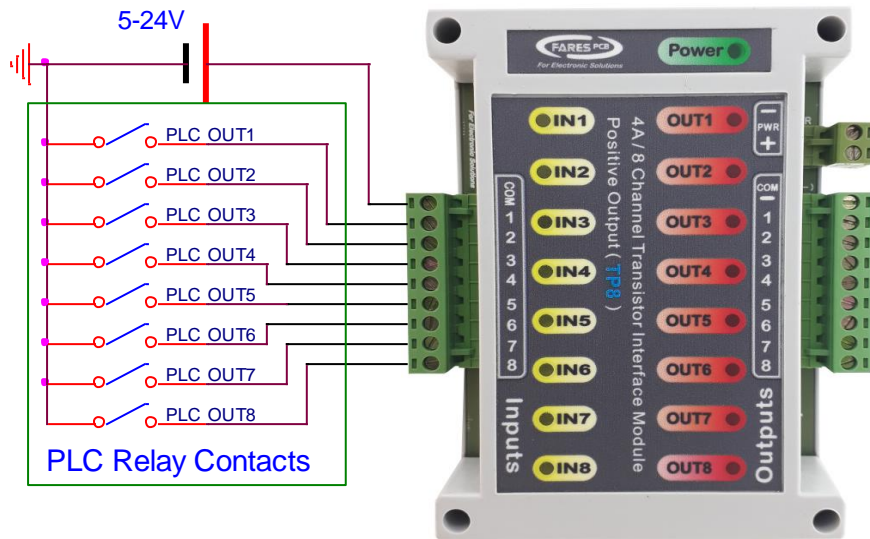


Interfacing microcontroller to TP8 module (common + / Active low control signal)

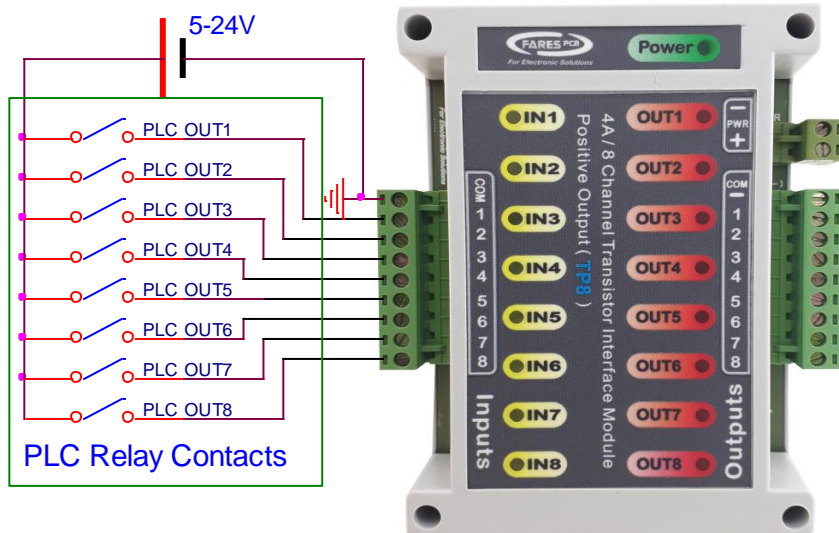


Interfacing microcontroller to TP8 module (common - / Active high control signal)

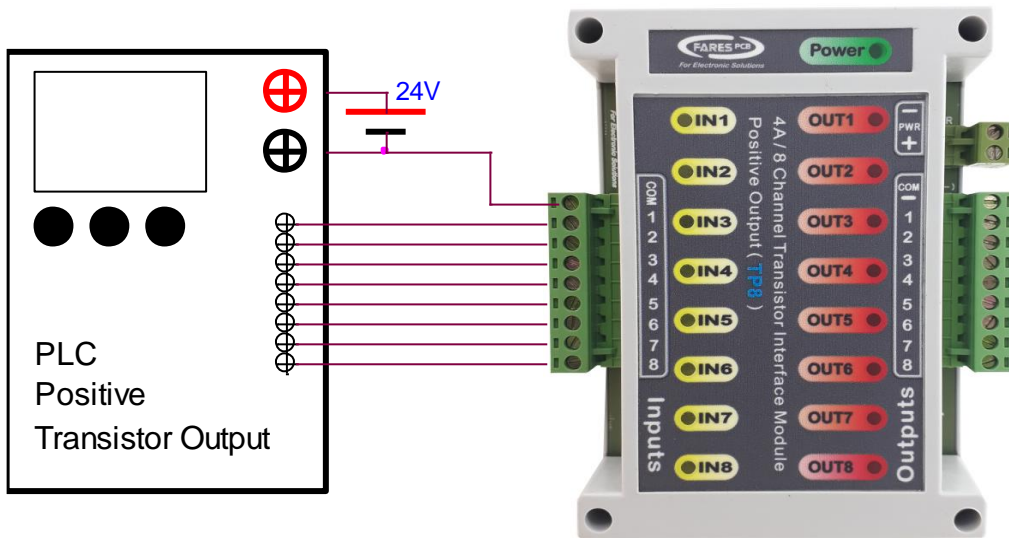
### Interfacing PLC to TP8 Module



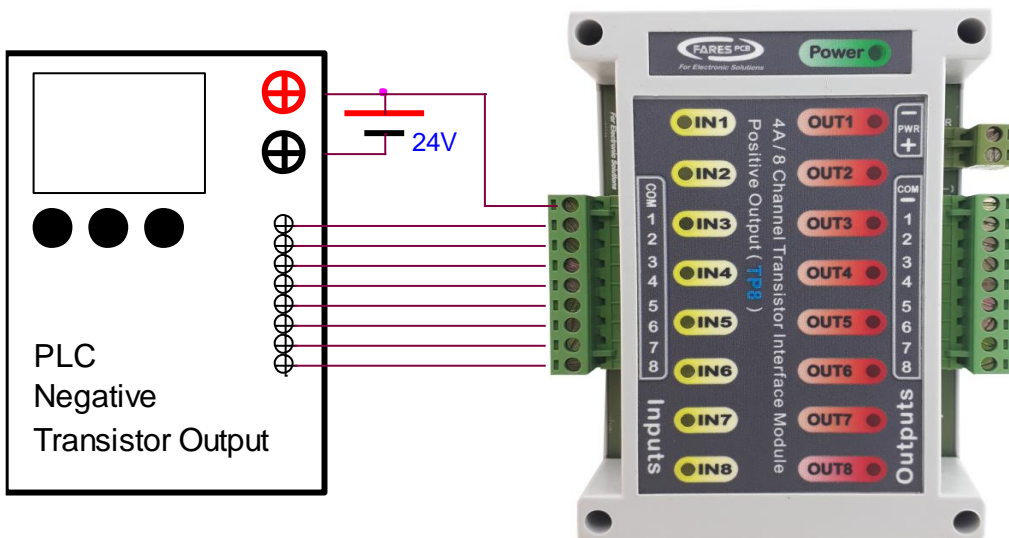
Interfacing PLC output relay to TP8 module (common + / Active low control signal)



Interfacing PLC output relay to TP8 module (common - / Active high control signal)

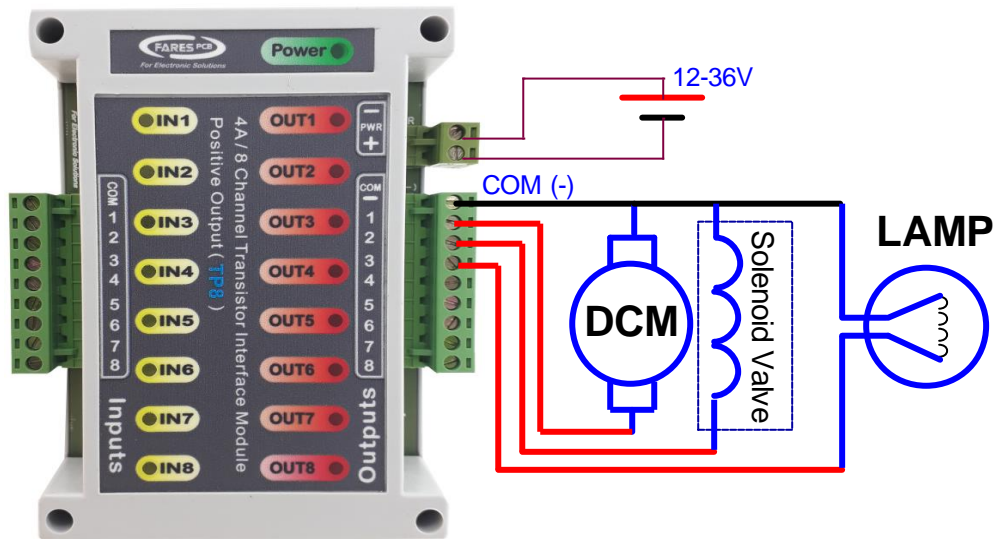


Interfacing PLC output transistor positive to TP8 module (common - / Active high control signal)



Interfacing PLC output transistor negative to TP8 module (common + / Active low control signal)

### Load Wiring example



Example of driving DC motor , Solenoid valve and Lamp using TP8 module



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