

# **TN8**

## **Interface Modules**

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

## TN8 Module key features

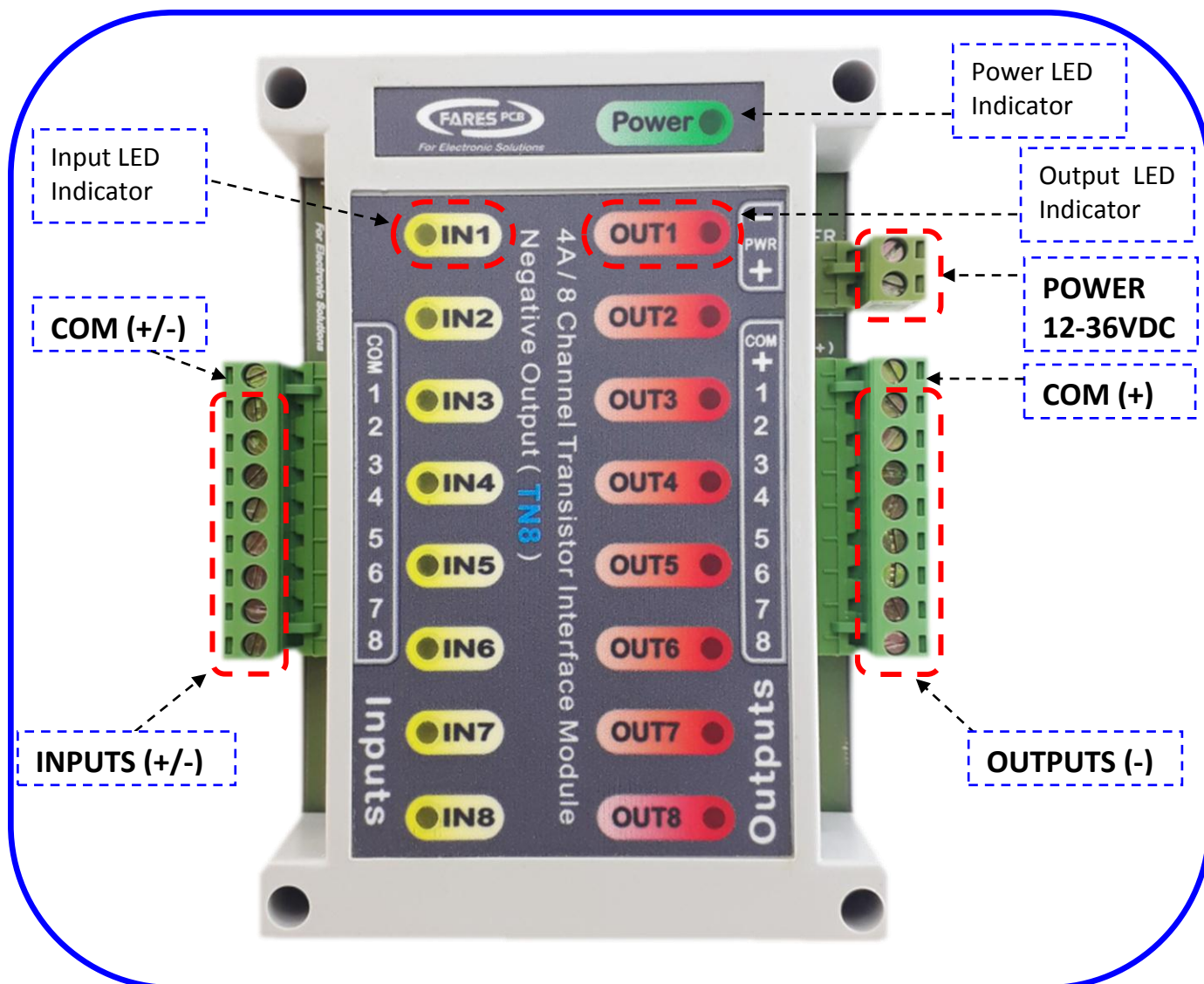
- Input power voltage 12-36 VDC.
- Output current -4A (Continuous) / -15A (Instantaneous).
- 8 output channels (MOSFET transistor).
- Opto-isolated outputs for safety.
- positive or negative input signal.
- Fuse protection for each output.
- Switching frequency 1000Hz.
- Green LED indicator for power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

## TN8 Typical applications

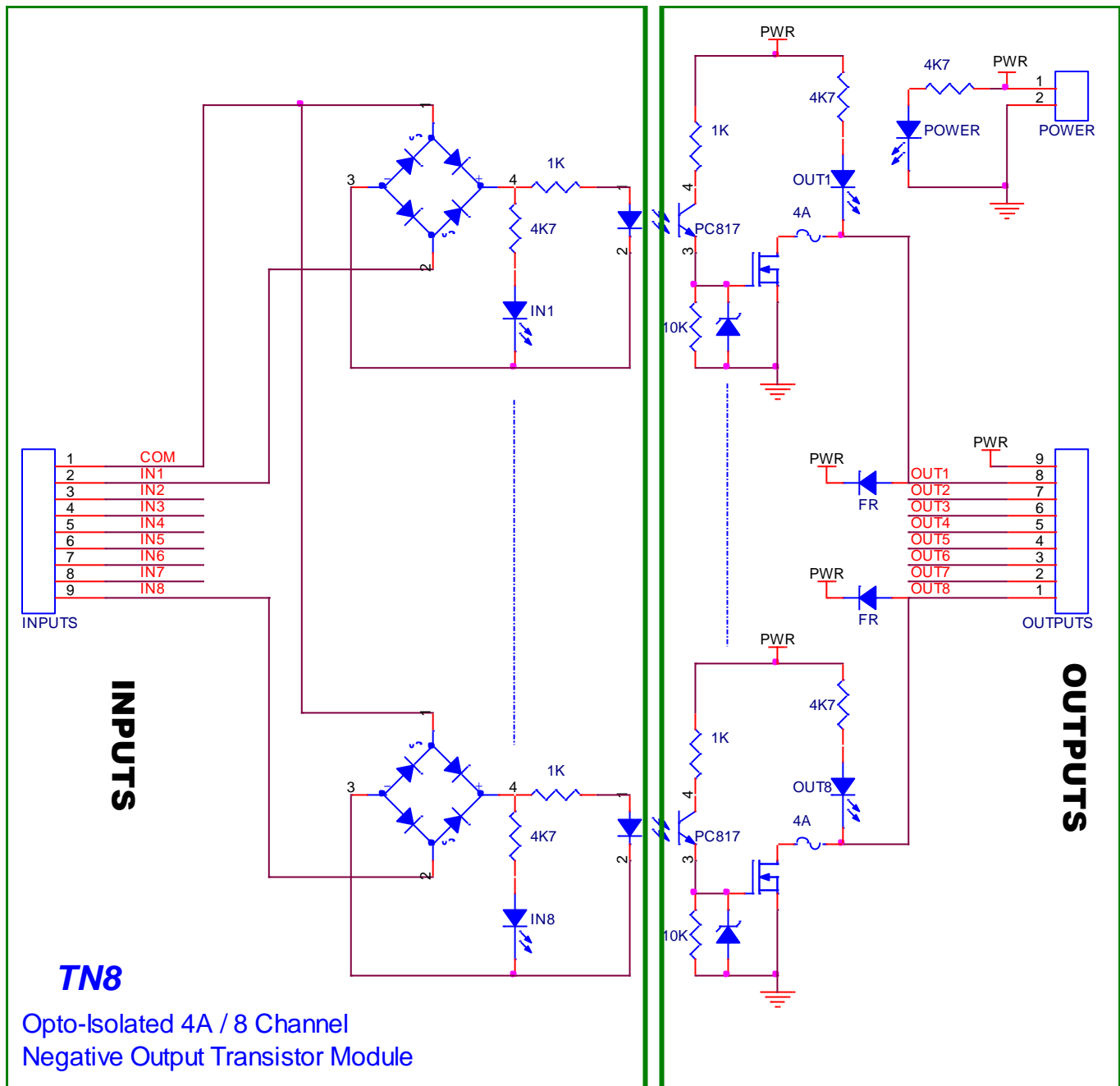
- PLC Control.
- Microcontroller applications.
- Electromagnetic valves.
- DC motor control.
- Home intelligent control systems.

## Technical data

Parameter	Min	Typ	Max	Unit
Model	TN8			-
Output type	Negative (N-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	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



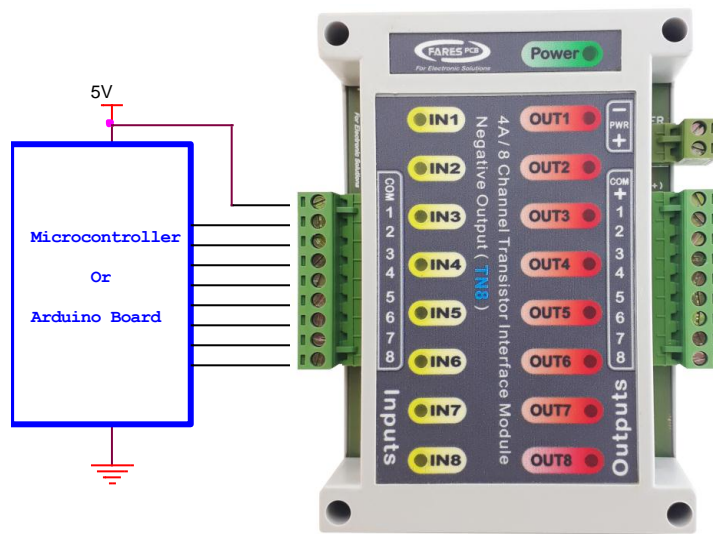
**TN8 Module**



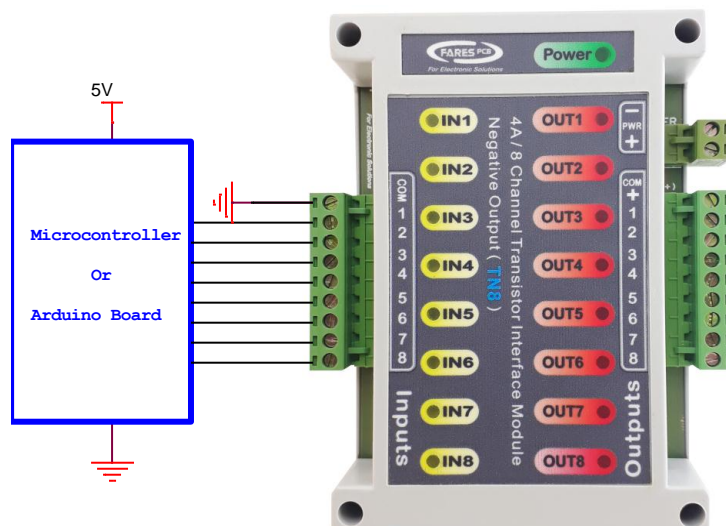
**TN8 (schematic diagram)**

**TN8** 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 TN8 Module



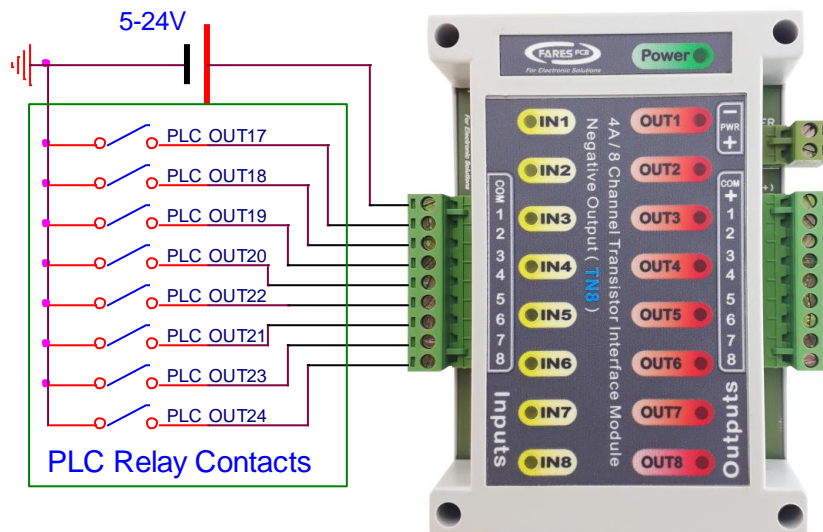
Interfacing microcontroller to TN8 module  
(common + / Active low control signal)



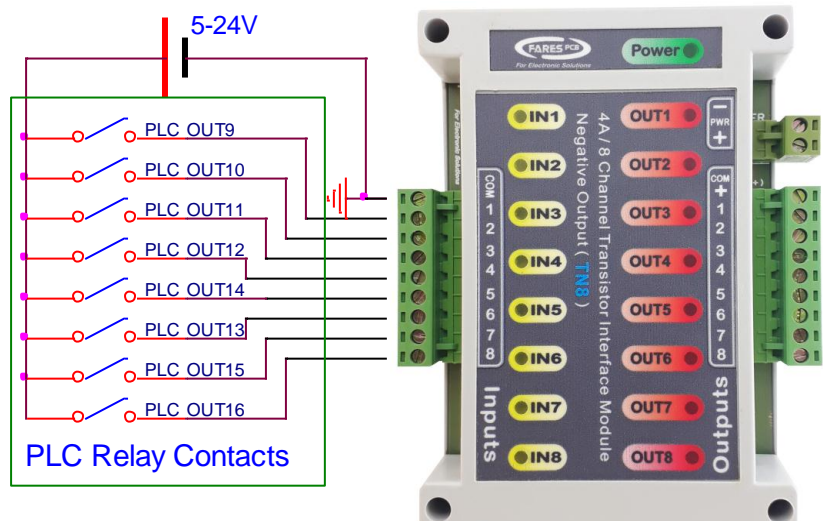
Interfacing microcontroller to TN8 module  
(common - / Active high control signal)



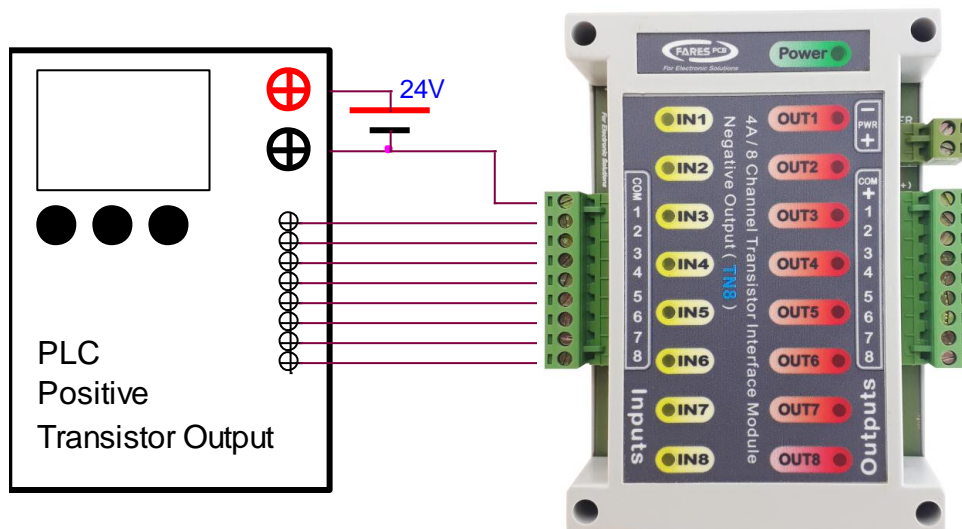
## Interfacing PLC to TN8 Module



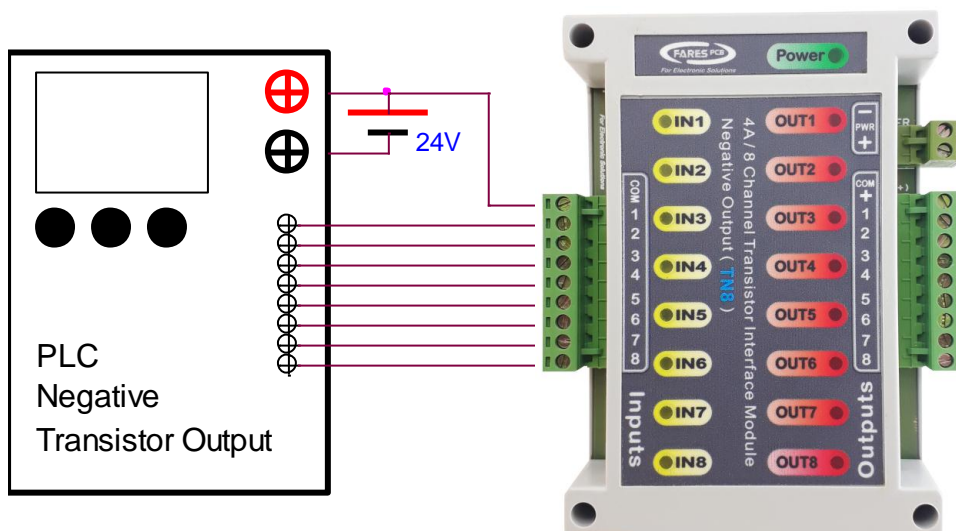
Interfacing PLC output relay to TN8 module  
(common + / Active low control signal)



Interfacing PLC output relay to TN8 module  
(common - / Active high control signal)

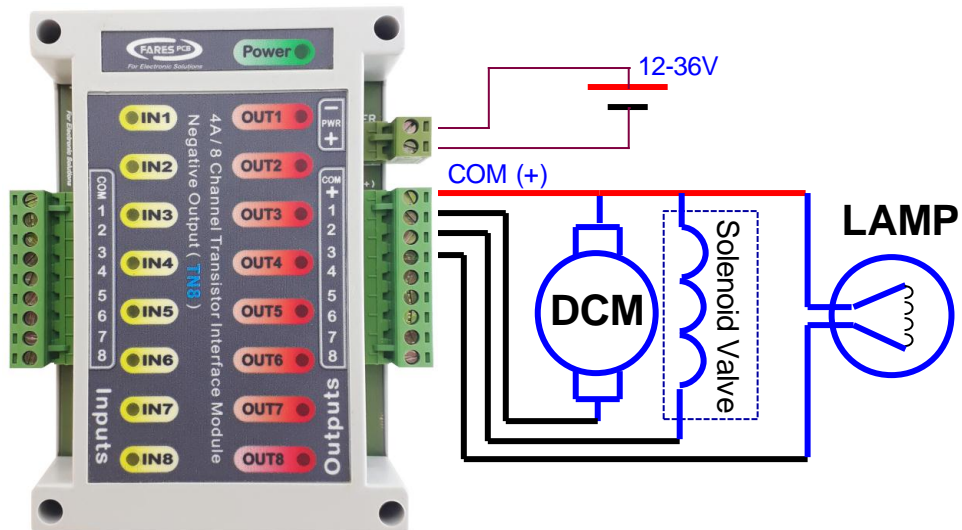


Interfacing PLC output transistor positive to TN8 module  
(common - / Active high control signal)



Interfacing PLC output transistor negative to TN8 module  
(common + / Active low control signal)

## Load Wiring example



Example of driving DC motor, Solenoid valve and Lamp using TN8 module



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