



Mosfet Power Switch

User's manual

v1.0



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Contents

- 1 Introduction..... 4
- 2 Connectors and pinout..... 4
- 3 Mechanical dimensions..... 5
- 4 Grant of license 6
 - 4.1.1 Access 6
 - 4.1.2 Usage 6
 - 4.1.3 Copyright 6
 - 4.1.4 Liability 6
 - 4.1.5 Fitness for purpose..... 6
 - 4.1.6 Mission Critical applications..... 6
 - 4.1.7 Errors 6
 - 4.1.8 Support..... 6
 - 4.1.9 Upgrades 6
 - 4.1.10 Trademarks..... 6

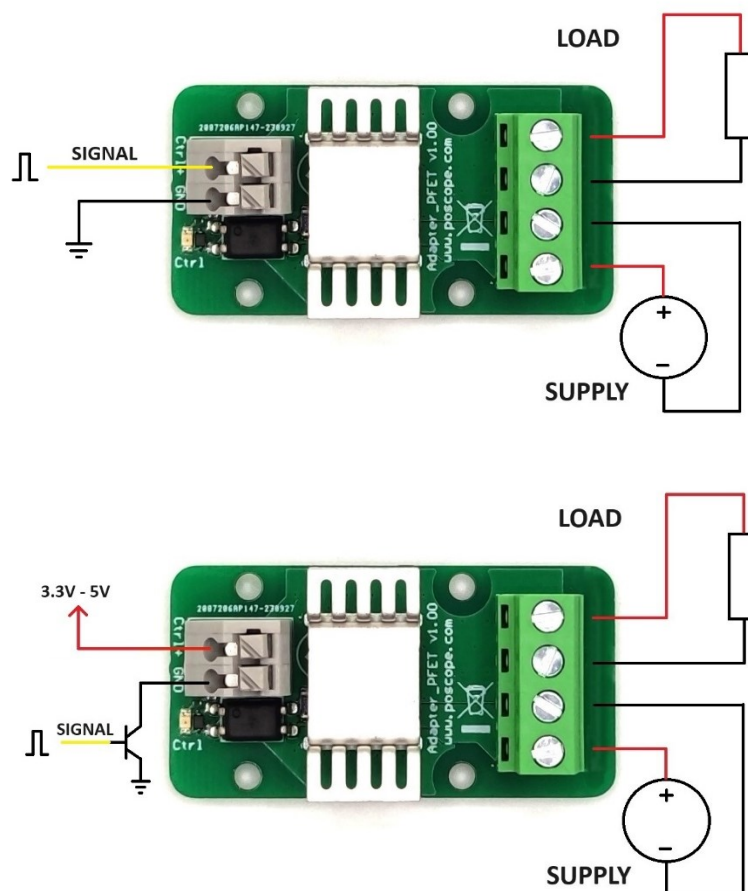
1 Introduction

The Mosfet Power Switch Adapter is intended to switch power loads up to 20A. It has P-channel power mosfet which means it is a high side switch and GND is directly connected to the load. The input control signal is galvanically isolated from the load and high voltage side. That way digital part has better EMC immunity and you can avoid ground loops or interference. The maximum voltage on the load side is 48V. For digital signal the minimum voltage is 3.3V and maximum at 5V. The adapter has small form factor with heatsink to dissipate heat when high power load is used (!!CAREFUL, heatsink is connected to the OUTPUT voltage – do not connect to GND or any potential!!). The hole spacing on the PCB allows for mounting with our [DIN rail mounng adapter](#).

Main Features:

- 48V, 20A load capacity
- 3.3V – 5V digital control signal
- 1kHz load switching capacity
- Optically isolated digital input
- Heatsink for better heat dissipation
- LED for visual signalling
- DIN mounting option

2 Connectors and pinout



Pin description

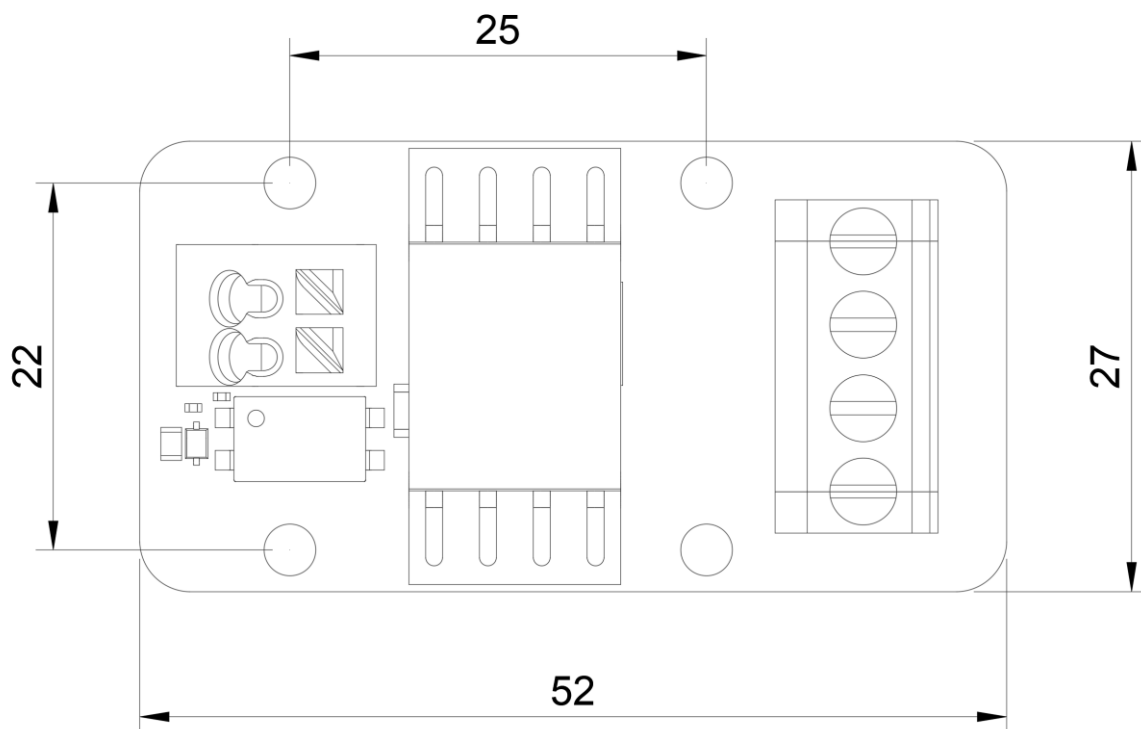
Power:

| | |
|------------|--|
| IN | Positive polarity input power pin |
| OUT | Switched output positive polarity power pin |
| GND | Power GND (not connected to the digital GND) |

Digital:

| | |
|--------------|--|
| CTRL+ | Digital input + pin (can be connected to I/O or power supply) |
| GND | Digital input – pin (can be connected to GND or switched to GND via FET) |

3 Mechanical dimensions



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