



PWR-SWITCH

Operation Manual

Rev.1.0 July 2020

olimex.com

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What is PWR-SWITCH

PWR-SWITCH is optically isolated high voltage switch, which could be controlled with small voltage controllers like Arduino, ESP32, Raspberry Pi and etc similar devices or microcontrollers.



PWR-SWITCH Features

PWR-SWITCH has these features:

- EU style input power plug
- EU style load receptacle
- Input voltage from 90 up to 230VAC
- Maximum load current 16A.
- Maximal load power is 3500W, resistive. Note that Inductive loads like electrical motors cause sparking when disconnected, which wear the contacts very fast!
- Mechanical number of open close operation 10 000 000 times
- Number of Switch on/off under full electrical load 100 000 times
- Green LED status indicator
- Control line works with DC Voltage in range 3..24VDC
- Enclosure Material: Fire-retardant ABS V0
- Color: White
- Operating Temperature: 0°C-40°C(32°F-104°F)
- Humidity: 5%-90%RH, Non-condensing
- Dimensions: 88*38*23mm (L*W*H)

How to use PWR-SWITCH?

PWR-SWITCH have control line, which has polarity:



If you want to drive PWR-SWITCH with Arduino you should connect the green terminal with “-“ to GND and the terminal with “+” to Arduino D0 pin. Here is the code to switch it on and off:

```
void setup () {  
    pinMode (D0, OUTPUT);  
}  
  
void loop () {  
    digitalWrite (D0, HIGH);  
    delay (1000);  
    digitalWrite (D1, LOW);  
    delay (10);  
}
```

The control line will work with any voltage from 3V up to 24V DC.

Certificates

PWR-SWITCH has CE certification and passed these standards tests:

CE-EMC:

- EN 55032:2015
- EN IEC 61000-3-2:2019
- EN 61000-3-3:2013 + A1:2019
- EN 55035:2017

CE-LVD:

- EN 62368-1:2014+A11:2017

All tests are made in accredited laboratory and kept on file at Olimex Ltd.



This certificate is responsible for testing sample only.
Please refer to this corresponding test report to get testing process and data.

CERTIFICATE

ATTESTATION Certificate of Compliance

Technical file of the company mentioned below has been inspected and audit has been completed successfully

The Low Voltage Directive 2014/35/EU has been taken as references for these processes.

Certificate's Holder : OLIMEX LTD
Address : ul. Pravda 2, Plovdiv 4000, Bulgaria
Manufacturer : OLIMEX LTD
Address : ul. Pravda 2, Plovdiv 4000, Bulgaria
Product Name : PWR-SWITCH
Product Model (S) : PWR-SWITCH
Trade Mark : N/A
Related Directive : 2014/35/EU
Related Standards : EN 62368-1:2014+A11:2017
Certificate Number : HK2007200517S
Report No. : HK2007200517-SR
Registration Date : Jul. 27, 2020



Certification Manager



The information of the certificate can be checked through www.cer-mark.com. The CE mark which is shown on the certificate can only be used under the conditions that the products complete with all of the relevant Directives of EC Declaration of Conformity. The Manufacturer should be responsible for the internal production control so that the products complied with the essential requirements of the above mentioned Directive(s). Certificate holder must notify all changes to the original certification laboratory of HUA K.





This certificate is responsible for testing sample only.
Please refer to this corresponding test report to get testing process and data.

CERTIFICATE

ATTESTATION Certificate of Compliance

Technical file of the company mentioned below has been inspected and audit has been completed successfully

The EMC Directive 2014/30/EU has been taken as references for these processes.

Certificate's Holder : OLIMEX LTD
Address : ul. Pravda 2, Plovdiv 4000, Bulgaria
Manufacturer : OLIMEX LTD
Address : ul. Pravda 2, Plovdiv 4000, Bulgaria
Product Name : PWR-SWITCH
Product Model (S) : PWR-SWITCH
Trade Mark : N/A
Related Directive : 2014/30/EU
EN 55032:2015
Related Standards : EN IEC 61000-3-2:2019
EN 61000-3-3:2013 + A1:2019
EN 55035:2017
Certificate Number : HK2007201828E
Report No. : HK2007201828-1ER
Registration Date : Jul. 27, 2020



Certification Manager



The information of the certificate can be checked through www.cer-mark.com. The CE mark which is shown on the certificate can only be used under the conditions that the products complete with all of the relevant Directives of EC Declaration of Conformity. The Manufacturer should be responsible for the internal production control so that the products complied with the essential requirements of the above mentioned Directive(s). Certificate holder must notify all changes to the original certification laboratory of HUAK.



Revision History

Revision 1.0 July 2020