EKM METERING INC.

EKM-Switch120 Spec Sheet

Build the IoT. Connect easily and safely. Control power from an Arduino, Raspberry Pi, Galileo or other micro-controller. The universal input connects to any circuit including 3.3V and 5 volt logic. No driver is requried.

Simply connect two wires. One to ground and one to your control signal, such as an output bit on a micro-controller.

The relay can also be controlled by an AC input voltage of 12 to 120VAC. No changes or jumpers are required.

The internal circuitry is very power efficient, using approximately 1/5W unswitched and 1.1W activated.

Applications include:

- IoT products, DIY gadgets, OEM test equipment
- Home and building automation
- Green power and energy conservation
- Kiosks, vending machines and signage controls

Multiple AC loads of up to 12 Amps total may be controlled. Your imagination is the limit.

The IoT control relay is rugged and reliable, with US design and QC. It ships fully assembled and tested with a 1 year warranty. This is our second design revision and over 20,000 have been built. Single units are available on Amazon.

- A single logic input signal controls one high-current SPDT AC relay. This one relay trigger signal switches three AC outlets simultaneously using a single pole-double throw relay.. One outlet normally is on. Two are normally off. A fourth outlet is unswitched. All outlets are proteced against surges and overloads..
- The universal control voltage 3-48VDC or 12-120VAC allows control from virtually any micro or AC source.
- Self-contained design eliminates dangerous high voltage wiring and safety hazards.
- Safety features include:

  3kV optical isolation -- eliminates shock hazard.
  Relay hysteresis -- prevents relay chatter.
  De-bounce protection -- extends contact life.
  LEDs -- verify input voltage and switch state.

- A large 3600W MOV clamps surges for clean power.
- The durable SPDT control relay is rated at 30/40A, 400,000 operations at 12A resistive. At no load, the estimated lifetime is 5.3 million mechanical operations.
- A 12A thermal safety circuit breaker switch prevents overloads and adds supplemental protection.
- Recommended operating range: AC input 90-120VAC. Current 0-8A with 18AWG power cords, 0-12A with 16AWG cord. Use14AWG for 12A spans over 10 feet.
- Input connector: C-13/C14. Output: 4x NEMA 5-15.
- Included cord: 12" C-13 to 5-15 16AWG. Cords up to 50' length are in-stock.
- Indoor use only: -35F to 145F, 5-95% noncondensing. Not for use on 220V.