

# Auditor 6M+3SW

Real-time enterprise-grade electricity monitoring and control

A variant of our enterprise-grade Auditor 6M with added switching control capability for up to 3 contactors via the MyEnergy mobile app or 3rd party apps via the Wattwatchers API.

The Auditor 6M+3SW is a specialised variant of our highly acclaimed Auditor 6M model. Retaining the same form factor, the Auditor 6M+3SW comes with an additional switching control feature, enabling the management of up to 3 contactors (which can comprise a combination of single-phase or three-phase circuits) through our in-house apps or 3rd party apps via the Wattwatchers API.

# **How it works**

The Auditor 6M+3SW is installed in the electrical switchboard and paired with one or more contactors. Once installed and configured, the energy consumption can be remotely monitored and switching can be controlled at individual circuit level in real time. The monitoring data and the switching functionally are accessible on computers, tablets and smartphones via our REST API, the Wattwatchers Software Toolkit (including the MyEnergy mobile app), or third-party interfaces.



# **Highlights**

- Switching control of up to 3
  contactors (1-phase or 3-phase or a
  combination of both) via in-house
  apps or 3rd party apps via the
  Wattwatchers API
- Monitoring of up to six single-phase circuits (AC-only) per device. Also works in 2- and 3-phase applications.
- Cellular communications real-time monitoring and switching control, no communications cabling required
- Compact form factor of 2 poles wide (36mm) excluding contactors
- Device and switching status indicators (LEDs) on the front of the unit

# Use cases

- Hot water control
- Electric vehicle charging
- Home energy management
- Solar inverter control
- Peak load or maximum demand management

# **Contactors**

The Auditor 6M+3SW works with contactors driven by 230V AC (50Hz) control coil voltage. Wattwatchers supplies 25A to 63A contactors for single-phase and three-phase applications. The single-phase contactor is 1-pole wide (18mm) and the three-phase contactor is 2-pole wide (36mm). The contactors are rated for 1,000,000 cycles of manual switch operating life and 100,000 cycles of electrical coil operating life.

# Datasheet

#### **POWER SUPPLY CHARACTERISTICS**

80-265 V AC Input-voltage

**Power** 2W

consumption

**Power tails** 1 metre single-phase or three-phase

#### **ENERGY MEASUREMENT SPECIFICATIONS**

**Energy** Short energy

measurements

Configurable from 5 seconds to 295

seconds (default is 30 seconds) Push to server - best effort delivery

Real energy, reactive energy, voltage, current, frequency, power factor

Long energy 5 minute intervals; servers request

logged data

Real energy, reactive energy, min/max

voltage, min/max current, power

factor

Voltage 1P2W, 2P3W, 3P4W

80-265V, 0.1V resolution

Current Split core CTs - 60A(10mm),

> 120A(16mm), 200A(25mm), 400A(25mm), 600A(36mm)

**Frequency** 45Hz to 60Hz

0.01Hz resolution

No. of channels

Measurement accuracy

**On-device** 

**Active energy** 

Class 1 based on IEC 62053-21 Class 2 based on IEC 62053-23

Reactive energy

Up to 25 days on-device of long

storage

energy logging capacity to ensure complete data

# **MECHANICAL CHARACTERISTICS**

Weight

IP degree of protection IP50 (front display) when installed

inside switchboard

**Dimensions** 89x77x36 mm (2 DIN poles)

**Mounting** Certified for Level III environment -

meter and distribution boards

Voltage connections 3 voltage references plus neutral

**Current sensor connections** 6 channel inputs

# **ENVIRONMENTAL AND SAFETY CONDITIONS**

**Ambient operating** 

temperature

-10°C to +55°C

Installation/pollution category ||| / 2

**Electromagnetic immunity** Level III (IEC 61000-4-2) Level III (IEC 61000-4-3)

Level III (IEC 61000-4-4) Level III (IEC 61000-4-5)

Certified for Level III environment -Safety

meter and distribution boards

# **CERTIFICATIONS**

**Responsible Supplier** 

Number

E5258

AS/NZ 60950.1:2015 Safety

EN 60950-1:2006 UL 6101.1 (2003)

**Emissions** AS/NZ CISPR 22 (2009+Amt1 2010)

FCC Part 15B

CISPR24:2010, CISPR 3:2015 **Immunity** 

**FCC ID** QIPELS61

Related spurious emissions AS/NZS 4268:2008 +A1:2010 C 8.2 and

EN 300 328 with reports

FCC sDoC 47 CFR Part15, Subpart B

**ARPANSA RP3** AS/NZS 2772

#### **COMMUNICATIONS**

Cellular Multi-network 3G/4G LTE Pentaband with **Type** 

> regional variants available covering Australia/Asia, Europe/Middle East and

US/North America

SIM Factory-fitted internal micro-SIM

**Hardware** SMA connector **Antenna** 

Supplied with a multi-band stubby

antenna

Optional external or high gain antenna options available to boost reception if

required

#### **SWITCHING**

**Switching** channels

**Channels** 

**Type** 

3 independent switching

channels controlled via MyEnergy

app or API

**Coil rating** 240V AC nominal 100mA per

switching channel

Zero-crossing control to minimise inductive stress on contactors

wattwatchers

# **CONTACTORS**

IEC/EN61095 **Standards Control coil voltage** 240V AC 50 Hz

Rated current, poles, and

size (width)

1-phase 25A 2P: 1x NO and 1x NC (18mm)

3-phase 25A 3P: 3x NC (36mm)

2.5 kV (4 kV at 12/24/48V AC)

Other ratings are available upon request

Insulation voltage (Ui)

Rated impulse withstand

voltage (Uimp)

**Pollution degree** 

**Manual switch operating** 

1,000,000 cycles

500V

**Electrical coil operating** life

Up to 12mm2

100,000 cycles

Cable terminal size (CSA)

**Mounting type** 

DIN Rail 35mm

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