



Quick Start Guide



Auditor A3R
Rogowski Coil

wattwatchers
DIGITAL ENERGY

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Auditor 3R

Complete these four easy steps, then start monitoring your site.

1. **Before you begin**
2. **Connect your Auditor**
3. **Use the onboarding tool**
4. **Validate that your installation is correct**

ONLY use this Auditor with the R-coils it is supplied with.
This Auditor is **NOT** compatible with third party coils or split-core Current Transformers.

ATTENTION: Must be installed by a licensed electrician in accordance with standard electrical safety regulations in your jurisdiction.

1. Before you begin

Ensure you have the equipment - See Auditor 3R checklist below. You'll need an internet connected smart device (e.g. smartphone, tablet, laptop) to configure the Auditor and capture information about the installation. A marker is useful for numbering Rogowski coil (R-coil) and cables during installation. You'll need a clamp meter for checking current measurements.

Check - That you have 35mm wide space available on the DIN rail. If there is not space, additional DIN rails may be mounted in the cabinet or an external enclosure used. Ensure that R-coil can accommodate the cable size (i.e. cable diameter fits within R-coil opening width).

Ensure there is a way to isolate the Auditor voltage inputs - An existing or new circuit breaker can be used depending on the regulations in your jurisdiction. A breaker is not included in the Auditor package.

Auditor 3R hardware checklist:

- Auditor device - 2-unit wide DIN-mount
- Rogowski Coils - Supplied in a set of three
- Wiring tails - single-phase, 3-phase or both
- Connectors - green-coloured plastic plugs

2. Connect your Auditor

Three-Phase Voltage Connections

Use this configuration when there are multiple phases present.

The voltage connections are labelled P1, P2, P3, N.

Connect voltage phases to P1, P2, and P3. Connect neutral to N.

Use three-phase wiring tails if they were provided with your Auditor.

Single-Phase Voltage Connections

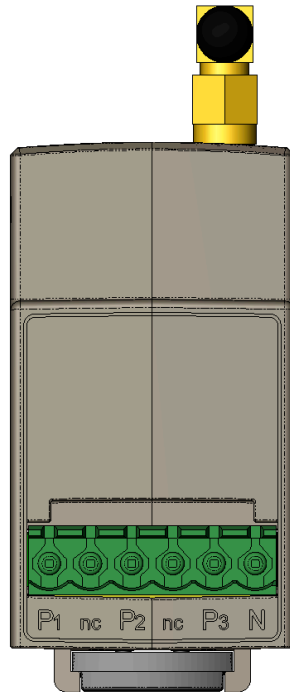
Use this configuration when one phase is present.

The voltage connections are labelled P1, P2, P3, N.

Connect P1, P2 & P3 to the same phase.

Connect neutral to N.

Use single-phase wiring tails if they were provided with your Auditor.



2. Connect your Auditor continued

Rogowski Coil Direction

Install Rogowski coils (R-coils) such that:

- For grid monitoring: arrow is from grid
- For solar monitoring: arrow is from inverter
- For load monitoring: arrow is towards the load.

About the R-coils:

- Only Wattwatchers-supplied R-coils are supported.
- Only modified A3R Auditors can be used for R-coils (because Auditors for use with split-core current transformers have a different hardware configuration).
- Wattwatchers R-coils are used when the measured current is greater than 600A, up to 3,000A, or when the aperture required is greater than 36mm in diameter.
- R-coils must be a loose fit around the conductor and the two ends must join completely.
- Wattwatchers 3,000A R-Coils can be used to measure 200A or more.



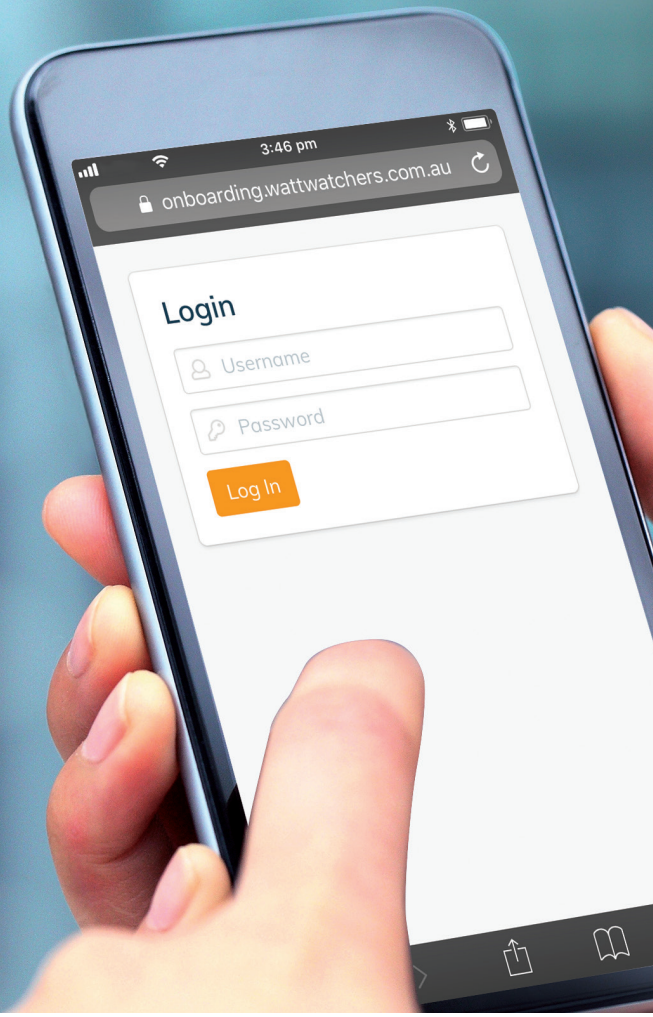
2. Connect your Auditor continued

Auditor 3R R-coil Connections

- The R-coil connections are labelled 3+, 3-, 2+, 2-, 1+, 1-
- Connect the R-coil blue wires to terminals marked 1+, 2+, 3+
- Connect the R-coil white wires to terminals marked 1-, 2-, 3-
- Connect the R-coil shields to the respective coil terminals marked 1-, 2-, 3-
- It is acceptable to use less than three R-coils.

Place R-coil connected to ...	On cables connected to ...
1+ -1	P1
2+ -2	P2
3+ -3	P3





3. Use the onboarding tool

The onboarding tool at onboarding.wattwatchers.com.au collects the installation details for each site including device serial number, circuit names and R-Coil size. Log into the onboarding tool and work through the steps to configure your devices for the installation site.



4. Validate installation

Check the lights

When installation is completed successfully, all three green lights on the front of the Auditor should be lit solid. The table below shows the meaning of the lights.

Auditor Indicators

L1	L2	L3	Explanation
Off	Off	Off	Powered off
Blinking	Off	Off	Powering on
Solid	Off	Off	Powered on - connecting to mobile network
Solid	Blinking	Off	Searching for SIM
Solid	Solid	Off	SIM found
Solid	Solid	Blinking	Waiting for servers
Solid	Solid	Solid	Connection complete

4. Validate installation continued

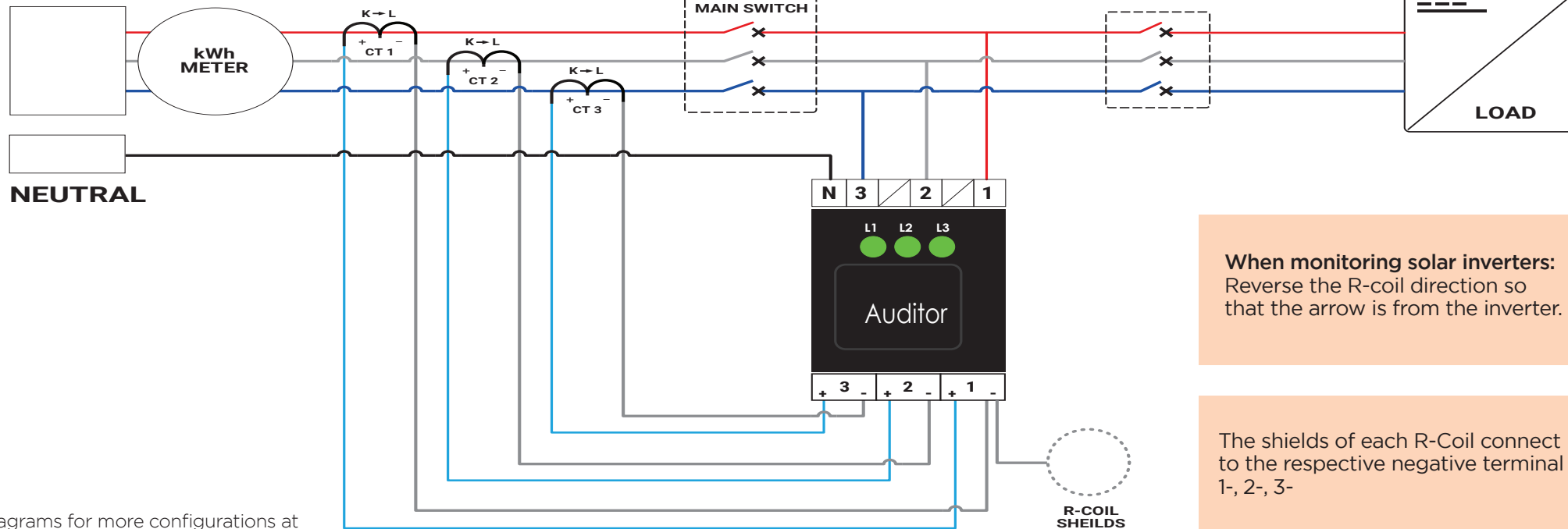
Validating that your installation is correct

If...	Then...	Otherwise...
Circuit current rating is less than the R-coil rating.	The correct size R-coils are installed.	Contact Wattwatchers support.
Install data shows three voltages around 220V, less than 265V.	The voltage connections are good.	Check the voltage connections to P1, P2, P3 are three phases.
Three-phase solar inverter circuits that have equal current and PF=1.	Solar R-coils are installed correctly.	Check R-coil wiring, phase and orientation.
With the solar inverter turned off, PF is +ve and expected value on all circuits.	Grid and load R-coils are installed correctly.	Ensure R-coil phase and orientation are correct. R-coils on the wrong phase may cause negative PF readings. Where there is solar operating, Grid circuits show -ve PF if there is "feed in".
Current measured with tongs meter is the same as current reported in the data.	The Auditor is configured correctly.	Check R-coil rings are fully rotated to the locked position. Use onboarding tools to change the R-coil to the correct size.

For more detailed fault finding information refer to
www.wattwatchers.com.au/support



GRID SUPPLY



NEUTRAL

When monitoring solar inverters:
Reverse the R-coil direction so that the arrow is from the inverter.

The shields of each R-Coil connect to the respective negative terminal 1-, 2-, 3-

Find diagrams for more configurations at
www.wattwatchers.com.au/support

Auditor 3R connection	
Supply	3 phases
Loads	None
Solar	None

Place R-coil connected to ...	On cables connected to ...
1+	P1
2+	P2
3+	P3



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Support

Need help with your installation?

Our team is available from 0900 to 1700, Monday to Friday, Sydney time.
Support phone: **02 8316 7540** (+61 2 8316 7540 from overseas)

Support: To lodge a Support ticket, please visit our Support Portal at
www.wattwatchers.com.au/support