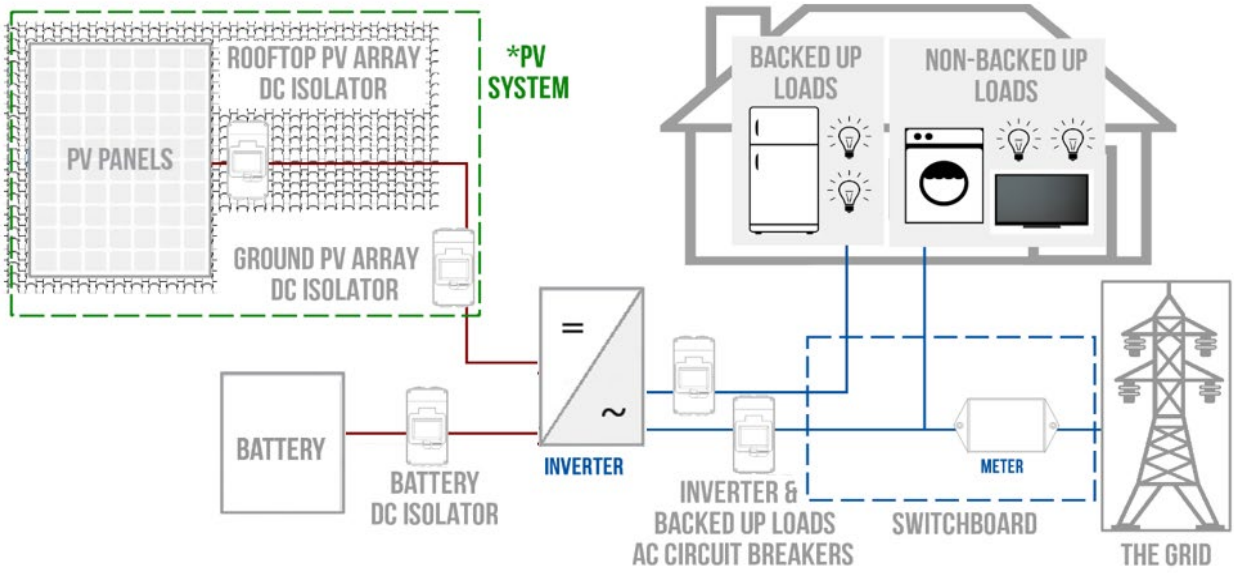
Battery System Quick Start Guide and Installation Instructions

Battery System: GoodWe Lynx Home F G2 Series Battery and GoodWe ET, GEH and EH Series Inverter

3 Phase : GW10KL-ET, GW15K-ET, GW20K-ET, GW25K-ET, GW29.9K-ET,
1 Phase : GW5000N-EH, GW6000N-EH, GEH8.6-1U-10, GEH10-1U-10

System Overview Diagram



Note: Installation of the PV system is not within the scope of this document.

Warnings

Disclaimer of Liability and Warranty: This pictorial guide does not replace installation manuals supplied with the components. Solahart assumes no responsibility for loss, damage or expense resulting from improper installation, handling, or misuse of components. Refer to the warranty statement in the Solahart Owner's guide for full warranty terms and conditions.

The Australian Consumer Law: Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

Installer Responsibilities

The installer is solely responsible for:

- Observing and conforming to all relevant Australian Standards, all relevant Clean Energy Council Accreditation guidelines and all applicable laws, ordinances, regulations, codes of practice and local or national building codes, including any that may have superseded this guide.
- Ensuring that the installation complies with AS/NZS 3000, AS/NZS 5139, AS/NZS 5033, AS 4777.1, AS/NZS 1768, AS 3008 and any relevant electrical service and installation rules for the state or territory where the system is installed.
- Ensuring that the Battery system and associated components are appropriate for the particular installation and the installation environment.
- Ensuring only parts supplied by Solahart Industries and installer supplied parts as specified by Solahart Industries are utilised (substitution of parts may void the warranty and invalidate certification).
- Ensuring that mounting fasteners have adequate pull-out strength and shear capacities to suit the installation.
- Ensuring safe installation of all electrical aspects of the Battery system.
- Ensuring that the building and building structures are capable of withstanding the additional loads and forces generated as a result of installing the Battery system.
- Ensuring mounting clearance requirements for all components are maintained.
- Ensuring components are not exposed to direct sunlight, rain fall and snow accumulation.
- Ensuring that the batteries and their components are protected from damage during transportation and storage.
- Ensuring that the weight of the battery is taken into account when handling and that all WHS policies are followed.

Tools Required

Use insulating tools and wear personal protective equipment (PPE) when operating the equipment to ensure personal safety. Wear anti-static gloves, cloths, and wrist strips when touching electron devices to protect the equipment from damage.

- Drill and drill bits suitable for drilling holes in the desired mounting surface/structure.
- M5, M6 & M10 tools.
- Torque wrench.
- Spirit level.
- Adjustable spanner.
- Electricians hand tools (screwdrivers, pliers, side cutters, cable crimps etc.)
- An Android or IOS smart device.

Note: The GoodWe mobile App "PV Master" must be downloaded before commissioning.

Note: See each component installation guides for additional tools required for installation.

Planning the Installation

Cablings and Conduits

Note: Each kit contains connectors/terminal lugs.

Any earthing cable, AC cable and conduits are not supplied by Solahart and should be selected based on the following criteria.

Inverter DC/AC cabling must be sized and installed in accordance with AS/NZS 3000, AS/NZS 3008.1.1 and any local applicable codes.

DC CABLING

Refer pages 4 and 5 for recommended cabling. Note: The recommended cable, breakers, inverter and battery combinations are derived based on Australian standards coupled with advise from GoodWe.

Note : Where multiple battery towers are installed, 16MM cable is recommended between the battery towers.

Note: Refer to page 4 and 5 of the table for compliant cables and breakers for inverters/HV battery in accordance with AS/NZS 3008.1.1. Note: The battery contains a 63Amp breaker.

DC CABLING

Cables must be selected so that the current carrying capacity is suitable for the maximum continuous current as shown below:

Inverter Model	ET Series					GEH Series		EH Series	
	GW10KL-ET	GW15KL-ET	GW20KL-ET	GW25K-ET	GW29.9K-ET	GEH8.6-1U-10	GEH10-1U-10	GW5000N-EH	GW6000N-EH
Max. Continuous Charging Current (A)	25 A	50 A	50 A	50 A x 2 (2 inputs)	50 A x 2 (2 inputs)	50 A	50 A	25 A	25 A
Max. Continuous Discharging Current (A)	25 A	50 A	50 A	50 A x 2 (2 inputs)	50 A x 2 (2 inputs)	50 A	50 A	25 A	25 A

Circuit Breaker and cable Recommendation:

Refer to the following table for circuit breaker/cable sizing between battery and inverter for 3 phase:

	1 Battery Tower / DC Breaker size between battery and inverter									
PCU / PN)	**1 X PCU-F52**	**1 X PCU-F52**	**1 X PCU-F52**	**1 X PCU-F52**	**1 X PCU-F52**	**1 X PCU-F52**	**1 X PCU-F52**			
Number of batteries per tower (PN : LX F3.2-20)	**3**	**4**	**5**	**6**	**7**	**8**	**9**	Wiring from battery terminals to circuit breaker	Circuit breaker to inverter	Connection between battery towers
kWh (1 Tower)	**9.6**	**12.8**	**16**	**19.2**	**22.4**	**25.6**	**28.8**			
3 Phase Hybrid										
GW10KL-ET Part Number	N/A	25 A/500V 057358	25 A/500V 057358	25 A/500V 057358	25 A/500V 057358	25 A/750V 057360 + 057361	N/A	Run R-HF-110 or X-HF-110 6mm double insulated single core cable in air from battery to circuit breaker	Run thermoplastic 4mm / 6mm single core cable in conduit from breaker to Inverter connections	16mm cable
GW15K-ET Part Number	N/A	50 A/500V 057359	50 A/500V 057359	50 A/500V 057359	50 A/500V 057359	50 A/750V 057360 + 057362	50 A/750V 057360 + 057362	Run thermoplastic 16mm in conduit from battery terminals to circuit breaker	Continue from circuit breaker to inverter in same cable	16mm cable
GW20K-ET Part Number	N/A	50 A/500V 057359	50 A/500V 057359	50 A/500V 057359	50 A/500V 057359	50 A/750V 057360 + 057362	50 A/750V 057360 + 057362	Run thermoplastic 16mm in conduit from battery terminals to circuit breaker	Continue from circuit breaker to inverter in same cable	16mm cable
GW25K-ET (per DC input) Part Number	N/A	50 A/500V 057359	50 A/500V 057359	50 A/500V 057359	50 A/500V 057359	50 A/750V 057360 + 057362	50 A/750V 057360 + 057362	Run thermoplastic 16mm in conduit from battery terminals to circuit breaker	Continue from circuit breaker to inverter in same cable	16mm cable
GW29.9K-ET (per DC input) Part Number	N/A	50 A/500V 057359	50 A/500V 057359	50 A/500V 057359	50 A/500V 057359	50 A/750V 057360 + 057362	50 A/750V 057360 + 057362	Run thermoplastic 16mm in conduit from battery terminals to circuit breaker	Continue from circuit breaker to inverter in same cable	16mm cable

Note:

The minimum number of batteries per tower for 3 phase is 4. Please note battery tower stacks are in series so multiple stacks need to be the same size. E.g if one tower stack was 4 , the next tower needs to be 4.

Note: The recommended cable, breakers, inverter and battery combinations are derived based on Australian standards coupled with advise from GoodWe.

Circuit Breaker and cable Recommendation:

Refer to the following table for circuit breaker/cable sizing between battery and inverter for 1 phase:

	1 Battery Tower / DC Breaker size between battery and inverter									
PCU / PN)	**1 X PCU-F52**	**1 X PCU-F52**	**1 X PCU-F52**	**1 X PCU-F52**	**1 X PCU-F52**	**1 X PCU-F52**	**1 X PCU-F52**			
Number of batteries per tower (PN : LX F3.2-20)	**3**	**4**	**5**	**6**	**7**	**8**	**9**	Wiring from battery terminals to circuit breaker	Circuit breaker to inverter	Connection between battery towers
kWh (1 Tower)	**9.6**	**12.8**	**16**	**19.2**	**22.4**	**25.6**	**28.8**			
1 Phase Hybrid										
GEH8.6-1U-10 Part Number	50 A/500V 057359	50 A/500V 057359	50 A/500V 057359	50 A/500V 057359	N/A	N/A	N/A	Run thermoplastic 16mm in conduit from battery terminals to circuit breaker	Continue from circuit breaker to inverter in same cable	16mm cable
GEH10-1U-10 Part Number	50 A/500V 057359	50 A/500V 057359	50 A/500V 057359	50 A/500V 057359	N/A	N/A	N/A	Run thermoplastic 16mm in conduit from battery terminals to circuit breaker	Continue from circuit breaker to inverter in same cable	16mm cable
GW5000N-EH Part Number	25 A/500V 057358	25 A/500V 057358	25 A/500V 057358	25 A/500V 057358	N/A	N/A	N/A	Run R-HF-110 or X-HF-110 6mm double insulated single core cable in air from battery to circuit breaker	Run thermoplastic 4mm / 6mm single core cable in conduit from breaker to Inverter connections	16mm cable
GW6000N-EH Part Number	25 A/500V 057358	25 A/500V 057358	25 A/500V 057358	25 A/500V 057358	N/A	N/A	N/A	Run R-HF-110 or X-HF-110 6mm double insulated single core cable in air from battery to circuit breaker	Run thermoplastic 4mm / 6mm single core cable in conduit from breaker to Inverter connections	16mm cable

Note:

The minimum number of batteries per tower for 1 phase is 3. Please note battery tower stacks are in series so multiple stacks need to be the same size. E.g if one tower stack was 4 , the next tower needs to be 4.

Note: The recommended cable, breakers, inverter and battery combinations are derived based on Australian standards coupled with advise from GoodWe.

AC CABLING

Cables must be selected so that the current carrying capacity is suitable for the maximum continuous current as shown below:

Inverter Model	**ET Series**					**GEH Series**		**EH Series**	
	GW10KL-ET	**GW15KL-ET**	**GW20KL-ET**	**GW25K-ET**	**GW29.9K-ET**	**GEH8.6-1U-10**	**GEH10-1U-10**	**GW5000N-EH**	**GW6000N-EH**
Max AC Current (On Grid) - incoming	22.7 A	34.0 A	45.0 A	50.0 A	50.0 A	45.5 A	45.5 A	43.4A	52.2A
Max AC Current (Backup, continuous)	16.5 A	22.7 A	30.3 A	37.9 A	45.5 A	39 A	43.5 A	21.7A	26.1A

COMMUNICATION CABLING

Communication cables are provided and pre-fitted on GoodWe Inverters. Extension of communication cable is permitted to the maximum length specified in the table below.

Cable Description	Cable Type	Provided Cable Length	Maximum Length
Cable between Inverter and Smart Meter	Data cable with RJ 45 connector pre-crimped on Meter end	10 m	100 m
Cable between Smart Meter and CT	Data cable with 1 twisted pair	3 m	5 m
Cable between Inverter and Battery	Data cable with RJ 45 connector pre-crimped on Battery end	3 m	100 m

Note: Check insulation voltage rating of these communication cables.

NOTE: ADDITIONAL CONDUIT TERMINATORS/GLANDS MAY BE REQUIRED DEPENDING ON THE INSTALLATION LOCATION.

Note: Refer to AS/NZS 3000 for appropriate conduit sizing.

1

Unpacking and Mounting Battery

Refer page 10 of the attached document “GoodWe User Manual”.

2

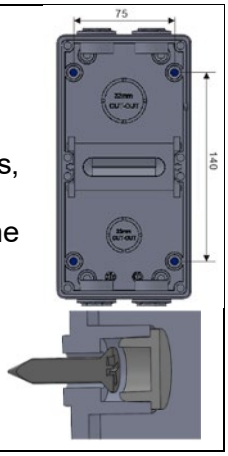
Mounting the Inverter

Follow the GoodWe ET, GEH, EH Series User Manuals to choose a suitable location and correctly mount the Inverter to the wall using appropriate fasteners and with regards to clearance requirements.

A lock can be installed on the inverter for anti-theft purposes.

3

MOUNTING AC ISOLATOR ENCLOSURES



1. Determine the mounting locations of the enclosures with regard to system clearances, layout specifications and AS/NZS 3000.
2. Install a minimum of two (2) fasteners diagonally opposite, to fix the enclosure to the wall.
3. Install the silicone rubber plugs supplied with the enclosure on the internal mounting points.

Note: Where the Inverter is not adjacent to the switchboard to which it is connected, an “Inverter AC Isolator” must be installed at the Inverter in accordance with AS/NZS 3000.

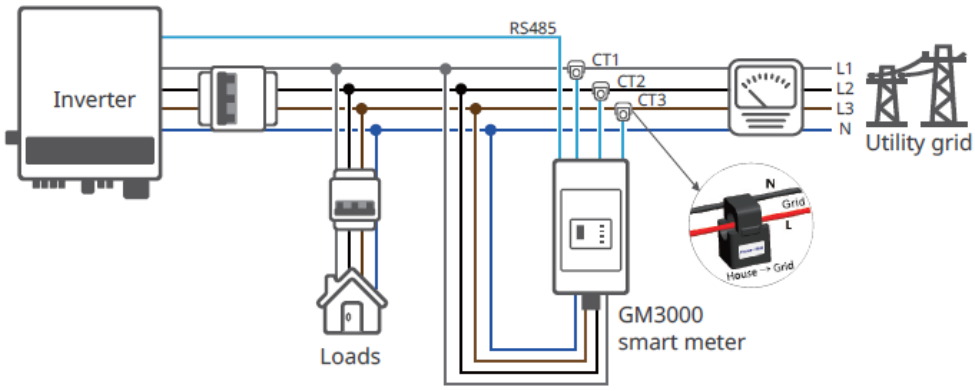
4 Mounting the Smart Meter

The Smart Meter can be attached to a DIN rail inside the switchboard via mounting clips supplied with the Meter.

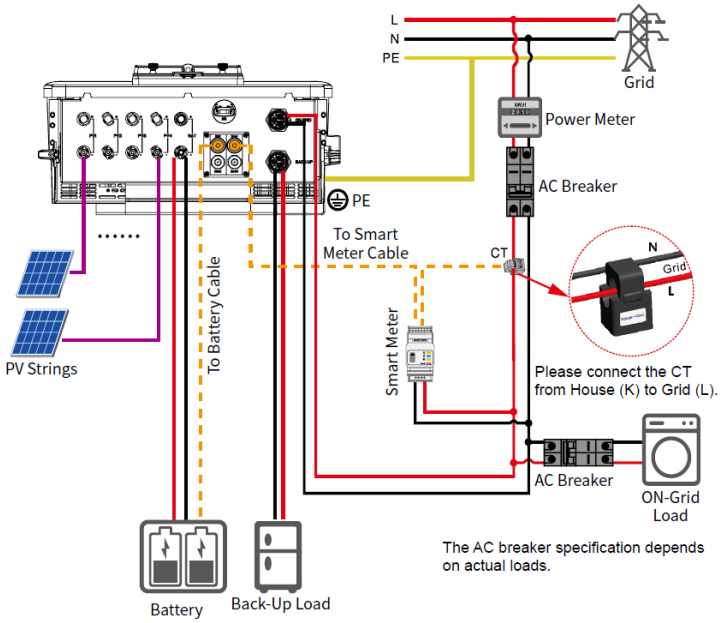
Note: Check Smart Meter and CT communication cable to ensure insulation is rated for the highest voltage present inside the switchboard. Additional insulation may be required.

ET Series Inverters

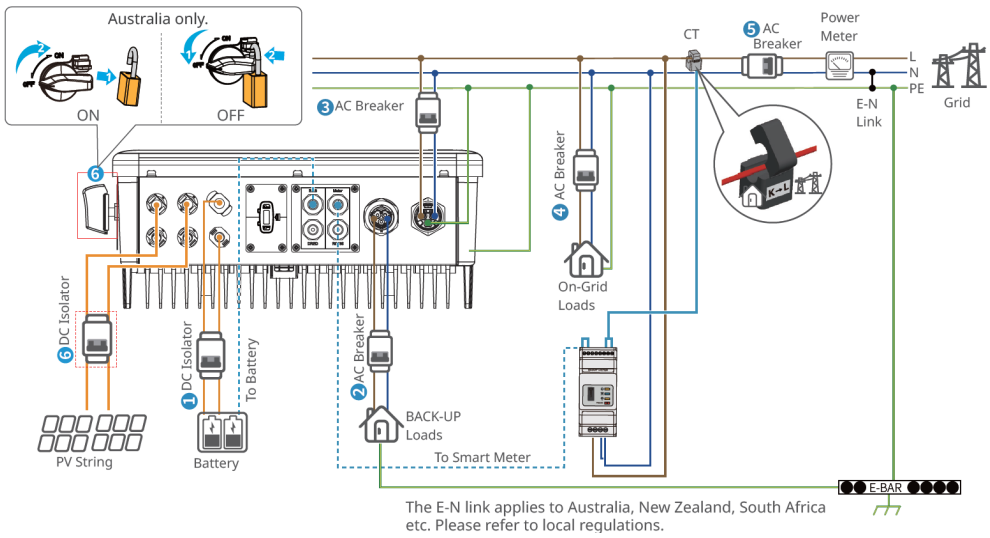
Refer to the relevant ET Series Inverter manual for further information,



GEH INVERTERS



EH Series Inverters



Communication Cable Wiring

5

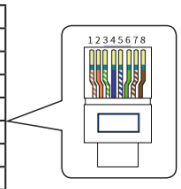
INVERTER

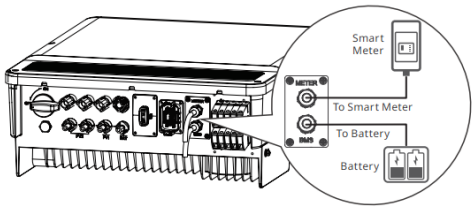
Communication cables to the Battery (CAN COM) and the Smart Meter (RS-485) are pre-installed at the inverter. Check all connections prior to installation.

All communication cabling between inverter, battery and metering shall be mechanically protected to prevent damage from vermin and tampering from unauthorised users.

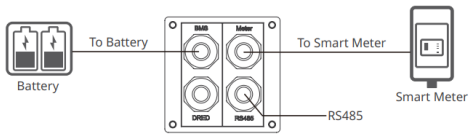
ET Series

No.	Color	BMS	Smart Meter
1	Orange&White	485_A2	NC
2	Orange	NC	NC
3	Green&White	485_B2	485_B1
4	Blue	CAN_H	NC
5	Blue&White	CAN_L	NC
6	Green	NC	485_A1
7	Brown&White	NC	485_B1
8	Brown	NC	485_A1

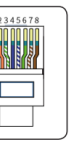




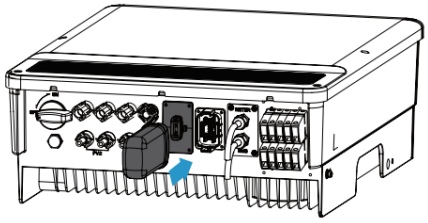
GEH and EH Series



No.	Color	BMS	Smart Meter	RS485
1	Orange&White	485_A2	NC	485_A
2	Orange	NC	NC	485_B
3	Green&White	485_B2	485_B1	485_A
4	Blue	CAN_H	NC	NC
5	Blue&White	CAN_L	NC	NC
6	Green	NC	485_A1	485_B
7	Brown&White	NC	485_B1	NC
8	Brown	NC	485_A1	NC



WiFi Kit, Bluetooth, Wi-Fi/LAN Kit module: optional



BATTERY

Connecting the Communication Cable

- Do not use RJ45 cable with protective cover.
- When one battery is applied, connect one communication cable to the inverter by RJ45 connector and connect the other cable to the terminal resistance.
- When multiple batteries are applied, connect the communication ports in series using net cables. Connect one communication cable of the last battery to the terminal resistance.

REFER PAGE 22 OF THE ATTACHED DOCUMENT "GOODWE USER MANUAL".

METER

Follow instructions from GoodWe ET, EH and GEH User Manual to connect the communication cable from the Inverter.

Note: Check the communication cables to ensure the insulation is rated for the highest voltage present inside the switchboard. Additional insulation may be required.

Note: If extension of communication cable is required, a female RJ45 joiner may be used to avoid crimping the connector.

Warning: If extension of communication cable is required, ensure cable joints are adequately protected from moisture.

Warning: Ensure all communication cables are adequately protected against mechanical damage.

6 DC and AC Cable Wiring

Warning: Ensure all DC and AC cables are adequately protected against vermin and other damage.

Warning: Ensure in-built DC isolator is switched OFF prior to wiring.

Note: Ensure the conductors on all cable ends are consolidated (e.g. using bootlace) before termination.

BATTERY

Connect DC cable and earthing wire according to the instructions in GoodWe Lynx F G2-Series Operating Manual.

Ensure each conductor is stripped and exposes appropriate amount of copper. Crimp the cables to the terminal lugs using mechanical hydraulic press pliers. All crimping shall be performed by an appropriately qualified technician.

REFER PAGE 21 OF THE ATTACHED DOCUMENT "GOODWE USER MANUAL".

Cover an unused power supply ports with protective covers. Ensure the polarity of the cables is correct to prevent any fuses from blowing.

Place wiring harness bar over the communication and power cables to protect them from damage. Install with M5 fasteners.

NOTE: A DC circuit breaker is 'in-built' within the Battery unit.

Warning: Ensure all cable entries on the Battery are adequately sealed and the Battery IP rating is maintained.

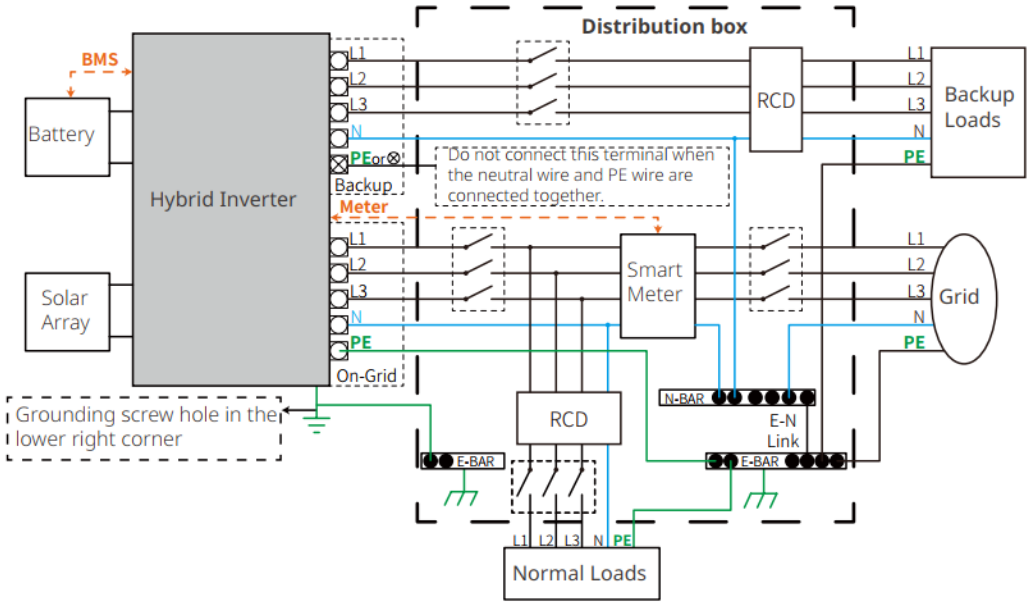
INVERTER

Follow instructions from GoodWe ET, EH and GEH User Manual to correctly connect the DC and AC power cables to the Inverter.

Configuration of Backup Loads Panel (Optional)

7 Backup functionality is required, follow the instructions below to configure the backup circuit distribution board.

For countries such as Australia, New Zealand, South Africa, etc., please follow local wiring regulations!



Size any AC Circuit breakers and Backup Load panel based on the following table:

Inverter Model	Max. Backup Continuous Power Output	Peak Backup Power Output	Backup Max. AC Output Current
GW10KL-ET	10.0 kVA	16.5 kVA(60 seconds)	16.5 A
GW15K-ET	15.0 kVA	24.0 kVA(3 seconds)	22.7 A
GW20K-ET	20.0 kVA	32.0 kVA(3 seconds)	30.3 A
GW25K-ET	25.0 kVA	30.0 kVA(60 seconds)	37.9 A
GW29.9K-ET	29.9 kVA	36.0 kVA(60 seconds)	45.5 A
GEH8.6-1U-10	5.0 kVA	10.32 kVA(60 seconds)	39 A
GEH10-1U-10	9500(@220Vac) 10000(@230Vac)	12 kVA(60 seconds)	43.5 A
GW5000N-EH	5.0 kVA	6.0 kVA(60 seconds)	21.7A
GW6000N-EH	6.0 kVA	7.2 kVA(60 seconds)	26.1A

Warning: Backup neutral must be connected to Grid neutral to maintain the MEN connection.

Note: Ensure the customer understands the backup supply power capabilities as shown in the table above.

Design Checklist for backup circuits:

- The circuits must not be overloaded.
- Ensure correct polarity of all battery conductors
- AC breakers should be sized in accordance with AS/NZS 3000.
- Backup panels and circuits must be labelled in accordance with AS/NZS 3000.
- Inductive loads should not be connected to backup circuits.
- **Backup circuits are not supplied if the inverter fails, a two-way changeover switch is recommended to be installed between inverter backup supply and grid supply. Refer to AS/NZS 3000 for switching of alternative supply.**

Commissioning

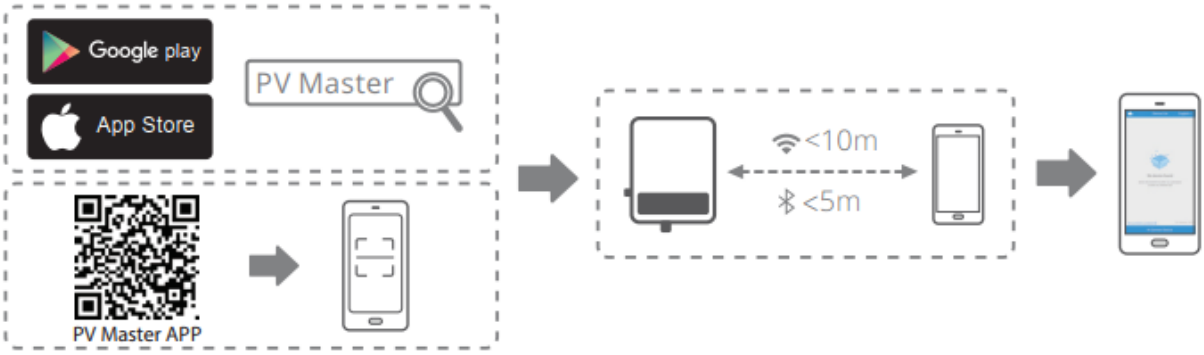
8

Warning: Before turning on the battery, please ensure that:

1. The equipment is levelled and installed firmly in a place where is convenient for operation and maintenance. The installation place is clean and well ventilated.
2. The ground cable, power cables, communication cables and terminal resistance are connected correctly and securely. Ensure that the polarity of all conductors is correct.
3. The Smart Meter and associated CT is installed on and monitoring the appropriate active conductor and is correctly orientated.
4. The cable ties meet the cabling requirements and are reasonably distributed. No cables or ties are broken.
5. Unused ports are sealed.
6. The Goodwe ET, EH or GEH inverter is correctly commissioned following the ET, EH or GEH user manual.

Follow steps below to commission the Battery System:

1. Turn ON the Inverter AC Isolator at the Inverter (if installed) and the Solar Supply Main Switch at the AC switchboard.
2. Turn ON PV Array DC Isolator(s) located adjacent to inverter.
3. Turn ON DC circuit breaker between the battery and inverter.
4. Turn ON Battery DC Isolator(s) integrated within the battery unit.
5. Press the switch button on the battery within 30s otherwise an alarm will sound.
6. Download the 'SolarGo' App from Google Play or Apple Store on your phone or tablet.



7. Connect to the GoodWe Inverter Wi-Fi network, "Solar-WiFi" using the password "12345678".
8. Open Mobile App "PV Master" and click on "Overview".
9. Click on the Inverter icon to verify Inverter serial number.
10. Click "Set", then "Basic Setting". Enter the installer password "goodwe2010".
11. Select "Safety Area" (grid setting) based on your DNSP. If your DNSP is not listed as an option, select "Australian". Then click "Next".

Warning: Do not select "AustraliaL".

12. Select "Work Mode" based on customer requirement:

    - choose "General Mode" if customer wants to maximise self-consumption (recommended);
    - choose "Backup Only" mode if the battery is only required for backup purposes;
    - choose "Economic Mode" to apply a Time of Use (TOU) profile.

Warning: Do not select "Off-Grid" mode. It is not supported in Australia.

13. Select "Battery Model" to be "GoodWe", then confirm the Battery model / capacity is correctly displayed.

Note: The Inverter should display the correct model based on the Battery DC input voltage.

Warning: Choosing the wrong battery model / capacity may result in system operation error and damage to equipment. The error message 'Battery Selection Abnormal' or 'Fault Code 37 – BMS Warning' will be displayed if you select the wrong battery model / capacity.

14. Click "Exit", then click "Yes" to restart the Inverter.
15. After the inverter has restarted, connect the smart device back to the Inverter Wi-Fi as in Step 5.
16. Open the 'PV Master' App. Click on "Param". If the "BMS status" is "Fault", check all cable connections and repeat from Step 5.
17. Click "Overview" and check if the battery charges and discharges according to power production and usage.
18. If there are any problems commissioning the system, contact a local Solahart Dealership immediately.

Warning: If the battery system is not commissioned immediately after installation, turn off the Battery Internal Circuit Breaker to avoid over-discharge and permanent damage to the Battery cells.

Note: Ensure firmware is updated as part of commissioning process of the Battery.

9 Monitoring Setup (Recomended)

Connect the inverter to the customer's Wi-Fi network, following the steps below:

1. Follow GoodWe "Wi-Fi Configuration guide" to connect the Inverter to the customer's Wi-Fi Network.
2. Download GoodWe App "SEMS Portal" and login using credentials provided by the local Solahart Dealership.
3. Create new plant and enter Battery system information.
4. Enter customer's email address as "Owner's E-mail".
5. Upload a photo of installation as the system profile picture.
6. Click "ADD". Scan the Inverter QR code to register the Inverter, or manually enter the Inverter serial number and Check Code as displayed on the rating label.
7. Verify system registration is completed.
8. Provide monitoring access information to the customer.

It is recommended to connect GoodWe Battery to the PV Master app for service and firmware upgrades. Refer to GoodWe EM User Manual for details.

If there are any problems commissioning the system, contact Solahart immediately.

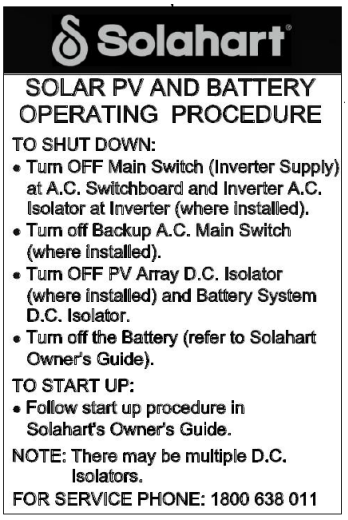
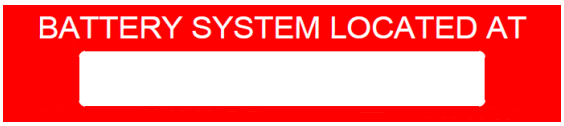
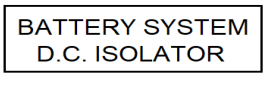
10 Labelling & Documents

This information is supplied here as a guide only. Additional labels may be required depending upon the installation and local requirements. Labels must be constructed to AS 1319 and installed according to AS/NZS 3000, AS/NZS 5139, AS/NZS 4777.1 and any local regulations. Refer to aforementioned standards for more information.

Battery cables must be labelled according to AS/NZS 5139, section 7.

When segregation of circuits occurs, these circuits must be labelled according to AS/NZS 5139, section 7.

The purpose of labelling is to clearly indicate that the electrical installation has multiple supplies and which circuits are affected by these supplies. Labelling also identifies the components that isolate the various supplies. The following table details labels that are supplied for Solahart Battery Systems.

Item	Description	Location
Battery Safety Datasheet (SDS)- provided with the Battery	Provided with the Battery	Place in document holder at the main switchboard or meter box
	White text on green background	On or immediately adjacent to the meter box and main switchboard
	Black and white	Prominent position adjacent to the GoodWe EM Inverter
	Black text on yellow background	Directly below “Solar PV and Battery Operating Procedure” label
	White text on red background	Prominent position on main switchboard **Note:** This label replaces the DUAL SUPPLY label for PV systems.
	White text on red background	Prominent position on main switchboard adjacent to Inverter location label
	Black text on white background	GoodWe EzMeter
	Black text on white background	Battery D.C. Circuit Breaker
	Black text on white background	Inverter AC isolator (If required)

MAIN SWITCH (INVERTER SUPPLY)	White text on red background	Inverter main switch in switchboard
MAIN SWITCH (BACKUP SUPPLY)	White text on red background	Inverter AC backup load switch in switchboard
BATTERY SYSTEM SHORT CIRCUIT CURRENT _____ A MAXIMUM D.C. VOLTAGE _____V **HAZARDOUS D.C. VOLTAGE**	White text on red background	Prominent position adjacent to the Battery
FIRE EMERGENCY PROCEDURES If smoke or fire is observed coming from the battery: 1. Evacuate from the affected area immediately 2. Call 000 and report the fire emergency Warning: Vent gases are flammable. Avoid contact with vented gases.	White text on red background	Prominent position adjacent to the Battery
	Black and white text with symbols on white background	Prominent position adjacent to the Battery
	Black and white text with symbols on white background	Prominent position adjacent to the Battery
SPILL CONTAINMENT In the event of spillage or leak, refer to the Battery Safety Datasheet in the switchboard for further actions.	Black text on white background	Prominent position adjacent to the Battery

	Black text on yellow background	Prominent position adjacent to the Battery
	Black text on yellow background	On every single Battery Module
	Black text on yellow background	In the main switchboard
	Black text on yellow background	Beside one of the PCEs (Application only when multiple Battery systems are installed)
	Black and white text with symbols on white background	Adjacent to the battery or on all doors to the room where the battery is located

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Final Checklist

- ☐ Ensure the Battery is installed level and secured to the wall.
- ☐ Ensure the Battery is installed in a suitable location and not subject to excessive temperatures. Failure to do so will result in power derating under charging / discharging operations.
- ☐ Ensure each Battery maintains adequate clearance requirements in order to dissipate any heat
- ☐ Restricted access or mechanical protection of any Battery Module/s is provided as per manufacturers' instructions, CEC Battery Installation Guidelines and AS/NZS 5139.
- ☐ Ensure all Battery Module/s are fastened on both sides.
- ☐ Ensure the Battery Internal DC Circuit Breaker and Inverter AC circuit breaker(s) are turned on. Also ensure the circuit breaker between the battery and inverter is on.
- ☐ Check that all cable entries maintain an appropriate IP ratings (water / dust)
- ☐ Verify the following on the "Param" page in "PV Master" App:
  - ➢ Inverter serial number is correct
  - ➢ Safety Country is selected correctly based on DNSP
  - ➢ Communication between Inverter and Battery—check "Battery BMS Status" is "normal"
  - ➢ Communication between Inverter and Meter—check "Import Power" is correct
  - ➢ Correct battery make/model/reserve energy is selected
  - ➢ State of charge (SOC) is more than 5%
- ☐ Take a screenshot of the "Param" page in "PV Master" for record keeping.
- ☐ Ensure the CT clamps are measuring correct circuits and are facing the correct direction.
- ☐ Ensure all wiring is in accordance with AS/NZS 3000 and local service regulations.
- ☐ Ensure Circuit Breakers and Isolators are sized in accordance with AS/NZS 3000.
- ☐ Ensure communication with GoodWe monitoring server (refer to GoodWe "Wi-Fi Configuration" manual). Verify Wi-Fi communication by checking Inverter "com" LED light.
- ☐ Ensure the customer's site is set up on GoodWe monitoring portal.
- ☐ Ensure the customer has access to monitoring portal.
- ☐ Complete the Solahart Warranty Registration and Installation Checklist and submit to Solahart.

If Backup loads are connected:

- ☐ Inform the customer if an AC changeover switch is installed on the Backup panel and demonstrate its functions.
- ☐ Ensure backup circuit neutral is linked to grid neutral.
- ☐ Verify the backup reserved % setting of the GoodWe Battery in "Advance Setting" in "PV Master" App and ensure it is set in accordance with customer expectations.
- ☐ Ensure the backup circuit is configured according to design guidelines and tested to confirm correct operation.
- ☐ Ensure the customer understands the limitations of backup functions and load limitations.
- ☐ In the event of a fault, contact Solahart for assistance.

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Revision Date: 2023 November