

Battery Compatibility Overview

This document lists the compatible batteries with all GoodWe storage inverters, consisting in 4 system types:

- 1) Low-voltage energy storage systems
- 2) High-voltage energy storage systems
- 3) Commercial and industrial energy storage systems
- 4) High-voltage Energy Storage Systems (for U.S only).

Only batteries listed in this document are approved for connection to GoodWe storage inverters according to GoodWe Limited Warranty.

1) Low-voltage Energy Storage Systems

| Battery Brand | Battery Series | Battery Model | Inverter Series | | | | | |
|--|--|---------------------------|-----------------|----|-----|-------|--------|---------|
| | | | ES | EM | SBP | ES G2 | SBP G2 | ES uinq |
| GOODWE | SECU-A | SECU-A5.4L | ● | ● | ● | ● | ● | |
| | Lynx Home U ^{*1} | LX U5.4-L | ● | ● | ● | ● | ● | ● |
| | Lynx Home U-20 ^{*2} | LX U5.4-20 | ● | ● | ● | ● | ● | ● |
| | Lynx Home A ^{*3} | LX A5.0-10 | | | | ● | ● | ● |
| ES/EM/SBP/BP: *1. ARM firmware versions 11 and above are required for compatibility. *2. ARM firmware versions 11 and above are required for compatibility. ES G2/SBP G2: *2. ARM firmware versions 02 and above are required for compatibility. *3. ARM firmware versions 07 and above are required for compatibility. | | | | | | | | |
| Battery Brand | Battery Series | Battery Model | ES | EM | SBP | ES G2 | SBP G2 | ES uinq |
| BYD | Battery-Box Pro Series ^{*1} | - | ● | ● | ● | ● | ● | |
| | Battery-Box Res Series ^{*1} | - | ● | ● | ● | ● | ● | |
| | Battery-Box LV Series | - | ● | ● | ● | ● | ● | |
| | Battery-Box Premium LVL ^{*2} | LVL 15.4 | ● | ● | ● | ● | ● | ● |
| | Battery-Box Premium LVS Series ^{*2} | - | ● | ● | ● | ● | ● | |
| ES/EM/SBP/BP: *1. ARM firmware versions 00 and above are required for compatibility. *2. ARM firmware versions 07 and above are required for compatibility. | | | | | | | | |
| Battery Brand | Battery Series | Battery Model | ES | EM | SBP | ES G2 | SBP G2 | ES uinq |
| LG | RESU LV Series | RESU 3.3 ^{*1} | ● | ● | | ● | ● | |
| | | RESU 6.5 ^{*1} | ● | ● | ● | ● | ● | |
| | | RESU 10 ^{*1} | ● | ● | ● | ● | ● | |
| | | RESU 12 ^{*2} | ● | ● | ● | ● | ● | |
| | | RESU 13 ^{*2} | ● | ● | ● | ● | ● | |
| | | RESU 6.4 EX ^{*1} | ● | ● | ● | ● | ● | |
| ES/EM/SBP/BP: *1. ARM firmware versions 00 and above are required for compatibility. *2. ARM firmware versions 07 and above are required for compatibility. | | | | | | | | |
| Battery Brand | Battery Series | Battery Model | ES | EM | SBP | ES G2 | SBP G2 | ES uinq |
| PYLON | US2000 Series ^{*1} | US2000 | ● | ● | ● | ● | ● | |
| | US3000 Series ^{*2} | US3000 | ● | ● | ● | ● | ● | |
| | US2000C Series ^{*1} | US2000C | ● | ● | ● | ● | ● | |
| | US3000C Series ^{*2} | US3000C | ● | ● | ● | ● | ● | |
| | Force L1 Series ^{*2} | Force-L1 | ● | ● | ● | ● | ● | |
| | Force L2 Series ^{*2} | Force-L2 | ● | ● | ● | ● | ● | |
| | US5000 Series ^{*3} | US5000 | | | | ● | ● | |
| ES/EM/SBP/BP: *1. ARM firmware versions 00 and above are required for compatibility. *2. ARM firmware versions 07 and above are required for compatibility. *3. ARM firmware versions 00 and above are required for compatibility. | | | | | | | | |
| Battery Brand | Battery Series | Battery Model | ES | EM | SBP | ES G2 | SBP G2 | ES uinq |
| DYNESS | DYNESS-LV Series ^{*1} | DYNESS-LV x1 | ● | ● | ● | | | |
| | | DYNESS-LV x2 | ● | ● | ● | | | |
| | | DYNESS-LV x3 | ● | ● | ● | | | |
| | | DYNESS-LV x4 | ● | ● | ● | | | |
| | POWERBOX F Series ^{*1} | POWERBOX F-2.5 | ● | ● | ● | | | |
| | | POWERBOX F-5.0 | ● | ● | ● | | | |
| | | POWERBOX F-7.5 | ● | ● | ● | | | |
| | | POWERBOX F-10.0 | ● | ● | ● | | | |
| | DYNESS-LV Series | DL5.0C ^{*2} | | | | ● | ● | ● |
| | | DL5.0X ^{*3} | | | | ● | ● | |
| A48100 ^{*4} | | | | | ● | ● | | |
| ES/EM/SBP/BP: *1. ARM firmware versions 07 and above are required for compatibility. ES G2/SBP G2: *2. ARM firmware versions 06 and above are required for compatibility. *3. ARM firmware versions 07 and above are required for compatibility. *4. ARM firmware versions 07 and above are required for compatibility. | | | | | | | | |

Battery Compatibility Overview

1) Low-voltage Energy Storage Systems

| Battery Brand | Battery Series | Battery Model | Inverter Series | | |
|--|---------------------------------|-------------------------------|-----------------|----|-----|
| | | | ES | EM | SBP |
| OLOID | LBS051100A Series ^{*1} | LBS051100A-A02 | ● | | |
| | | LBS051100A-A03 | ● | | |
| | LBS051200A Series ^{*1} | LBS051200A-A02 | ● | | |
| | | LBS051200A-A03 | ● | | |
| ES: *1. ARM firmware versions 12 and above are required for compatibility. | | | | | |
| Battery Brand | Battery Series | Battery Model | ES | EM | SBP |
| Soluna | LV(48V) Battery Series | Soluna 4K Pack | ● | ● | ● |
| | | Soluna 5K Pack | ● | ● | ● |
| | | Soluna EOS 5K Pack | ● | ● | ● |
| Battery Brand | Battery Series | Battery Model | ES | EM | SBP |
| ALPHA ^{*1} | Smile5-BAT Series | SMILE5-BAT ^{*2} | ● | ● | ● |
| | Smile-BAT Series | Smile-BAT-10.1P ^{*2} | ● | ● | ● |
| | | Smile-BAT-10.3P ^{*2} | ● | ● | ● |
| | | Smile-BAT-13.3P ^{*3} | ● | ● | ● |
| | M48112-P Series | M48112-P ^{*3} | ● | ● | ● |
| M48100-P Series | M48100-P ^{*3} | ● | ● | ● | |
| ES/EM/SBP/BP: *1. CAN communication line sequence of ALPHA-ESS battery does not match GoodWe inverters. A matching solution provided by ALPHA-ESS is required. *2. ARM firmware versions 10 and above are required for compatibility. *3. ARM firmware versions 11 and above are required for compatibility. | | | | | |
| Battery Brand | Battery Series | Battery Model | ES | EM | SBP |
| Tecloman | Firefly Series ^{*1} | Firefly-3.6K | ● | ● | ● |
| | | Firefly-7.2K | ● | ● | ● |
| | | Firefly-10.8K | ● | ● | ● |
| | | Firefly-14.4K | ● | ● | ● |
| | | Firefly-18.0K | ● | ● | ● |
| | | Firefly-21.6K | ● | ● | ● |
| | | Firefly-25.2K | ● | ● | ● |
| ES/EM/SBP: *1. ARM firmware versions 12 and above are required for compatibility. | | | | | |
| Battery Brand | Battery Series | Battery Model | ES | EM | SBP |
| UZENERGY | L051100-A Series | L051100-A ^{*1} | ● | ● | ● |
| ES/EM/SBP: *1. ARM firmware versions 12 and above are required for compatibility. | | | | | |

Battery Compatibility Overview

2) High-voltage Energy Storage Systems

| Battery Brand | Battery Series | Battery Model | Inverter Series | | | | | | | | |
|--------------------------|--|---------------------------|-----------------|----|----|----|-----|--------------|-------|--------------|---|
| | | | ET (5-10kW)* | EH | BT | BH | EHB | ET (15-30kW) | ET G2 | ET (40~50KW) | |
| GOODWE | Lynx Home F ¹ Lynx Home F PLUS+ ² | LX F6.6-H | ● | ● | ● | ● | ● | ● | ● | ● | |
| | | LX F9.8-H | ● | ● | ● | ● | ● | ● | ● | ● | |
| | | LX F13.1-H | ● | ● | ● | ● | ● | ● | ● | ● | |
| | | LX F16.4-H | ● | | ● | | | | ● | ● | |
| | Lynx Home F G2 ³ | LX F9.6-H-20 | ● | ● | ● | ● | ● | | | ● | ● |
| | | LX F12.8-H-20 | ● | ● | ● | ● | ● | | ● | ● | |
| | | LX F16.0-H-20 | ● | ● | ● | ● | ● | | ● | ● | |
| | | LX F19.2-H-20 | ● | ● | ● | ● | ● | | ● | ● | |
| | | LX F22.4-H-20 | ● | | ● | | | | ● | ● | |
| | | LX F25.6-H-20 | ● | | ● | | | | ● | ● | |
| | | LX F28.8-H-20 | | | | | | | ● | ● | |
| | Lynx C ⁴ | GW60KWH-D-10 | | | | | | | ● | | |
| | | GW100KWH-D-10 | | | | | | | | | ● |
| | | GW100KWH-D-10 (Extension) | | | | | | | | | ● |
| | | LX C101-10 | | | | | | | | | ● |
| | | LX C120-10 | | | | | | | | | ● |
| | | LX C138-10 | | | | | | | | | ● |
| Lynx Home D ⁵ | LXD5.0-10 | ● | | ● | | | | ● | ● | ● | |

*. Including ET Series: ET PLUS+, ET PLUS+ (16A)

ET/EH/BT/BH/EHB:

*1. ARM firmware versions 19 and above are required for compatibility.

*2. ARM firmware versions 23 and above are required for compatibility.

*3. For compatibility, the ET/BT series requires ARM25 and DSP09 versions and above; the EHB series requires ARM25 and DSP version 03 and above; the EH/BH series requires ARM25 and DSP version 07 and above.

*5. For compatibility, the ET/BT series requires ARM28 and DSP version 12 and above.

ET (15-30KW)/ET G2:

*3. For compatibility, the ET (15~30K) Series requires ARM07 and DSP version 06 and above.

*4. For compatibility, the ET (15~30K) series requires ARM07 and above.

*4. ET 50KW with Lynx C-Series LX C101-10, LX C120-10 cannot reach the maximum power of the inverter.

*5. For compatibility, the ET(15~30K) series requires ARM 09 and DSP version 08 and above.

| Battery Brand | Battery Series | Battery Model | ET (5-10kW)* | EH | BT | BH | EHB | ET (15-30kW) | ET G2 | ET (40~50KW) |
|---------------|--------------------------------------|---------------|--------------|----|----|----|-----|--------------|-------|--------------|
| BYD | Battery-Box HV Series ¹ | - | ● | ● | ● | ● | | | | |
| | | HVM 8.3 | | ● | ● | ● | ● | | | |
| | Battery-Box Premium HVM ² | HVM 11.0 | ● | ● | ● | ● | ● | ● | ● | |
| | | HVM 13.8 | ● | ● | ● | ● | ● | ● | ● | |
| | | HVM 16.6 | ● | ● | ● | ● | ● | ● | ● | |
| | | HVM 19.3 | ● | ● | ● | ● | ● | ● | ● | |
| | | HVM 22.1 | ● | ● | ● | ● | ● | ● | ● | |
| | | HVS 5.1 | ● | ● | ● | ● | ● | ● | ● | |
| | Battery-Box Premium HVS ² | HVS 7.7 | ● | ● | ● | ● | ● | ● | ● | |
| | | HVS 10.2 | ● | ● | ● | ● | ● | ● | ● | |
| HVS 12.8 | | ● | ● | ● | ● | ● | ● | ● | | |

*. Including ET Series: ET PLUS+, ET PLUS+ (16A)

ET/EH/BT/BH/EHB:

*1. ARM firmware versions 07 and above are required for compatibility.

*2. ARM firmware versions 11 and above are required for compatibility.

ET15-30K:

*2. ARM firmware versions 02 and above are required for compatibility.

BYD CAN communication line PIN1/2 corresponds to inverter CAN communication line PIN4/5.

*2. The maximum charge/discharge current of single-cluster HVS battery is 25A, ET30K with single-cluster HVS battery will not be able to reach the nominal maximum charge/discharge power of the inverter. ET15~30 series with HVM battery maximum charging and discharging current of 40A.

| Battery Brand | Battery Series | Battery Model | ET (5-10kW)* | EH | BT | BH | EHB | ET (15-30kW) | ET G2 | ET (40~50KW) |
|---------------|--------------------------------|----------------|--------------|----|----|----|-----|--------------|-------|--------------|
| LG | RESU FLEX Series ¹ | FLEX 8.6 | ● | | | | | | | |
| | | FLEX 12.9 | ● | | | | | | | |
| | | FLEX 17.2 | ● | | | | | | | |
| | RESU Type-R Series | RESU10H Type-R | | | | | ● | | | |
| | RESU Prime Series ² | RESU10H Prime | | | | | ● | | | |
| | | RESU16H Prime | | | | | ● | | | |

*. Including ET Series: ET PLUS+, ET PLUS+ (16A)

ET/EH/BT/BH/EHB:

*1. Only compatible with ET PLUS+ Series. ARM firmware versions 23 and above are required for compatibility.

*2. ARM firmware versions 20 and above and DSP versions 02 and above are required for compatibility.

Battery Compatibility Overview

2) High-voltage Energy Storage Systems

| Battery Brand | Battery Series | Battery Model | Inverter Series | | | | | ET (40~50KW) | |
|---|-----------------------------------|--------------------------|-----------------|----|----|----|-------|--------------|--|
| | | | ET (5-10kW)* | EH | BT | BH | ET G2 | | |
| PYLON | Powercube H1 Series ^{*1} | POWERCUBE-H1-48 | ● | ● | ● | ● | | | |
| | Force H1 Series ^{*2} | Force-H1 | ● | ● | ● | ● | | | |
| | Force H2 Series ^{*2} | Force-H2 | ● | ● | ● | ● | ● | | |
| | Force H3 Series | Force-H3 | | | | | ● | | |
| *. Including ET Series: ET PLUS+, ET PLUS+ (16A) ET/EH/BT/BH/EHB: *1. ARM firmware versions 07 and above are required for compatibility. Please note that the nominal voltage of POWERCUBE-H1-48 Series must be within the Battery Voltage Range of GoodWe inverters. Maximum 8 units for EH/BH, and 11 units for ET/BT. *2. ARM firmware versions 14 and above are required for compatibility. *2. When the 4-module FORCE-H1 is undervoltage, the battery voltage will be lower than 180V, so a minimum of 5 modules are required to match the ET. *2. When 2 modules of FORCE-H2 are undervoltage, the battery voltage will fall below 180V, so a minimum of 3 battery modules are required to match the ET. | | | | | | | | | |
| Battery Brand | Battery Series | Battery Model | ET (5-10kW)* | EH | BT | BH | ET G2 | ET (40~50KW) | |
| DYNESS | Tower Series ^{*1} | Tower T7 | | ● | | ● | | | |
| | | Tower T10 | ● | ● | ● | ● | | | |
| | | Tower T14 | ● | ● | ● | ● | | | |
| | | Tower T17 | ● | | ● | | | | |
| | Power Rack-HV4F | Power Rack-HV4F-11s | | | | | | ● | |
| *. Including ET Series: ET PLUS+, ET PLUS+ (16A) ET/EH/BT/BH/EHB: *1. ARM firmware versions 10 and above are required for compatibility. | | | | | | | | | |
| Battery Brand | Battery Series | Battery Model | ET (5-10kW)* | EH | BT | BH | ET G2 | ET (40~50KW) | |
| Soluna | HV Battery Series ^{*1} | Soluna 7K Pack HV | | ● | | ● | | | |
| | | Soluna 10K Pack HV | ● | ● | ● | ● | | | |
| | | Soluna 15K Pack HV | ● | | ● | | | | |
| *. Including ET Series: ET PLUS+, ET PLUS+ (16A) ET/EH/BT/BH/EHB: *1. ARM firmware versions 10 and above are required for compatibility. | | | | | | | | | |
| Battery Brand | Battery Series | Battery Model | ET (5-10kW)* | EH | BT | BH | ET G2 | ET (40~50KW) | |
| iPotisEdge | Mint-JKE ^{*1} | Mint-JKE5 | | ● | | ● | | | |
| | | Mint-JKE10 | | ● | | ● | | | |
| | | Mint-JKE15 | ● | ● | ● | ● | | | |
| | | Mint-JKE20 | ● | ● | ● | ● | | | |
| *. Including ET Series: ET PLUS+, ET PLUS+ (16A) ET/EH/BT/BH/EHB: *1. ARM firmware versions 12 and above are required for compatibility. | | | | | | | | | |
| Battery Brand | Battery Series | Battery Model | ET (5-10kW)* | EH | BT | BH | ET G2 | ET (40~50KW) | |
| WTS | WTS Power-CORE 1.0 ^{*1} | WTS Power-CORE 1.0-5.5 | | | | | | | |
| | | WTS Power-CORE 1.0-8.3 | ● | | ● | | | | |
| | | WTS Power-CORE 1.0-11.0 | ● | | ● | | | | |
| | | WTS Power-CORE 1.0-13.8 | ● | | ● | | | | |
| | WTS Energy-CORE 1.0 ^{*1} | WTS Energy-CORE 1.0-9.6 | | | | | | | |
| | | WTS Energy-CORE 1.0-12.8 | ● | | ● | | | | |
| | | WTS Energy-CORE 1.0-16.0 | ● | | ● | | | | |
| | | WTS Energy-CORE 1.0-19.2 | ● | | ● | | | | |
| | | WTS Energy-CORE 1.0-22.4 | ● | | ● | | | | |
| WTS Energy-CORE 1.0-25.6 | ● | | ● | | | | | | |
| ET/BT: *1. ARM firmware versions 14 and above are required for compatibility. | | | | | | | | | |

3) Commercial and Industrial Energy Storage Systems

| Battery Brand | Battery Series | Battery Model | Inverter Series | |
|---|-----------------------------|---------------|-----------------|-----|
| | | | ETC | BTC |
| GOODWE | Lynx C series ^{*1} | LX C 101-10 | ● | ● |
| | | LX C 120-10 | ● | ● |
| | | LX C 138-10 | ● | ● |
| | | LX C 156-10 | ● | ● |
| ETC 50K/BTC 50K: *1. EMS firmware versions 02 and above are required for compatibility. ETC 100K: *1. EMS firmware versions 00 and above are required for compatibility. | | | | |

Battery Compatibility Overview

4) High-voltage Energy Storage Systems (for U.S only).

| Battery Brand | Battery Series | Battery Model | Inverter Series | | | |
|---|--|--------------------|-----------------|------|---------|----------|
| | | | A-ES | A-BP | ES-US20 | SBP-US20 |
| Soluna | HV Battery Series ^{**2} | Soluna 7K Pack HV | ● | ● | ● | ● |
| | | Soluna 10K Pack HV | ● | ● | ● | ● |
| | | Soluna 15K Pack HV | ● | ● | ● | ● |
| A-ES/A-BP: *1. ARM firmware versions 10 and above are required for compatibility. *2. Soluna HV does not include UL9540 certification. | | | | | | |
| ES-US20/SBP-US20: *1. ARM firmware versions 07 and above are required for compatibility. *2. Soluna HV does not include UL9540 certification. | | | | | | |
| Battery Brand | Battery Series | Battery Model | A-ES | A-BP | ES-US20 | SBP-US20 |
| BYD | Battery-Box Premium HVL ^{**1} | HVL 12.0 | ● | ● | | |
| | | HVL 16.0 | ● | ● | | |
| | | HVL 20.0 | ● | ● | | |
| | | HVL 24.0 | ● | ● | | |
| | | HVL 28.0 | ● | ● | | |
| | | HVL 32.0 | ● | ● | | |
| A-ES/A-BP: *1. ARM firmware versions 11 and above are required for compatibility. | | | | | | |
| Battery Brand | Battery Series | Battery Model | A-ES | A-BP | ES-US20 | SBP-US20 |
| OLOID | LBS102100A Series ^{**1} | LBS102100A | ● | ● | | |
| | LBS153100A Series ^{**1} | LBS153100A | ● | ● | | |
| | LBS205100A Series ^{**1} | LBS205100A | ● | ● | | |
| A-ES/A-BP: *1. ARM firmware versions 14 and above are required for compatibility. | | | | | | |
| Battery Brand | Battery Series | Battery Model | A-ES | A-BP | ES-US20 | SBP-US20 |
| Soluna | HV Battery Series ^{**2} | Soluna 7K Pack HV | ● | ● | | |
| | | Soluna 10K Pack HV | ● | ● | | |
| | | Soluna 15K Pack HV | ● | ● | | |
| A-ES/A-BP: *1. ARM firmware versions 10 and above are required for compatibility. *2. Soluna HV does not have UL9540 certificate. | | | | | | |
| Battery Brand | Battery Series | Battery Model | A-ES | A-BP | ES-US20 | SBP-US20 |
| LG | RESU Type-R Series ^{**2,3} | RESU10H_Type-R | ● | ● | | |
| | RESU Prime Series ^{**4} | RESU10H Prime | ● | ● | | ● |
| | | RESU16H Prime | ● | ● | | ● |
| A-ES/A-BP: *1. ARM firmware versions 20 and above and DSP versions 05 and above are required for compatibility. *2. When A-BP is compatible with LG RESU HV Series, the micro-grid applications are not supported. *3. The compatibility of A-ES/A-BP with LG RESU10H Type-R is stated as follows: 1) Connection of RESU10H Type-R batteries in parallel is not supported. 2) For first inverter operation with LG battery, the inverter must be powered by the grid for the LG battery to be activated. 3) LG RESU10H Type-R battery Max discharge power is 5kW. Please ensure backup load peak power does not exceed 5kVA in backup mode. Loads with large inrush current (such as inductive loads including motors) may lead to output failure on backup side. 4) Depending on real-time battery condition, such as SOC, battery temperature etc, the battery output power may not be able to support backup load, which could lead to system failure. If this occurs, both battery and backup supply will cease. Power will resume if there is solar power available. 5) LG battery needs time to switch from charge to discharge up to the preset power. Quickly switching from on-grid mode to backup mode could fail if backup load power is higher than the max power ramp-up the battery can sustain within a limited time. *4. ARM firmware versions 05 and above and DSP versions 02 and above are required for compatibility. | | | | | | |

GoodWe Battery Compatibility Overview-20240702-EN-V029.1 Information may be subject to change without notice.