Battery Compatibility Overview

GOODWE
Smart Energy Innovator

This document lists the compatible batteries with 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.

In addition to the batteries listed in this document, there are some batteries that follow the GOODWE CAN communication protocol that are not listed in this document, if you need to get the matching information for these batteries, please consult GOODWE's technical service personnel.

1) Low-voltage Energy Storage Systems

Battery Brand	Battery Series	Battery Model	Inverter Series					
			ES	EM	SBP	ES G2	SBP G2	ES Uniq
GOODWE	SECU-A	SECU-A5.4L	●	●	●	●	●	
	Lynx Home U	LX U5.4-L*1	●	●	●	●	●	●
		LX U5.4-20*2	●	●	●	●	●	●
		LX U5.0-30*4				●	●	●
	Lynx Home A	LX A5.0-10*3				●	●	●
		LX A5.0-30*5				●	●	●

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.
*4. ARM firmware versions 09 and above are required for compatibility.
*5. ARM firmware versions 09 and above are required for compatibility.
ES uniq 8~12kW:
*4. ARM firmware versions 10 and above are required for compatibility.
*5. ARM firmware versions 09 and above are required for compatibility.

Battery Brand	Battery Series	Battery Model	ES	EM	SBP	ES G2	SBP G2	ES Uniq
BYD	Battery-Box Pro Series*1	-	●	●	●	●	●	
	Battery-Box Res Series*1	-	●	●	●	●	●	
	Battery-Box LV Series*2	-	●	●	●	●	●	
	Battery-Box Premium LVL*2	LVL 15.4	●	●	●	●	●	
	Battery-Box Premium LVS Series*2	-	●	●	●	●	●	
	BatteryBox LV5.0*3	LV5.0				●	●	●

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.
ES G2/SBP G2:
*3. ARM firmware versions 09 and above are required for compatibility.
ES uniq 8~12kW:
*3. ARM firmware versions 10 and above are required for compatibility.

Battery Brand	Battery Series	Battery Model	ES	EM	SBP	ES G2	SBP G2	ES Uniq
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:
*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 Uniq
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 Compatibility Overview

1) Low-voltage Energy Storage Systems

Battery Brand	Battery Series	Battery Model	Inverter Series					
			ES	EM	SBP	ES G2	SBP G2	ES Uniq
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]				●	●	
	POWER BOX G2[*5]	POWER BOX G2				●	●	●
	POWER BRICK[*6]	POWER BRICK				●	●	●

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.
*5. ARM firmware versions 08 and above are required for compatibility.
*6. ARM firmware versions 08 and above are required for compatibility.
ES Uniq:
*5. ARM firmware versions 09 and above are required for compatibility.
*6. ARM firmware versions 09 and above are required for compatibility.

Battery Brand	Battery Series	Battery Model	ES	EM	SBP	ES G2	SBP G2	ES Uniq
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	ES G2	SBP G2	ES Uniq
Soluna	LV (48V) Battery Series	Soluna 4K Pack	●	●	●			
		Soluna 5K Pack	●	●	●			
		Soluna EOS 5K Pack	●	●	●			

Battery Brand	Battery Series	Battery Model	ES	EM	SBP	ES G2	SBP G2	ES Uniq
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	ES G2	SBP G2	ES Uniq
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	ES G2	SBP G2	ES Uniq
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 F6.4-H-20		●		●		●		
		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								●
		LX C156-10								●
	Lynx Home D*5	LXD5.0-10	●	●	●	●		●	●	

*. Including ET Series: ET PLUS+, ET PLUS+ (16A)
**.Including EH Series :EH PLUS
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.
*5. For compatibility, the EH/BH series requires ARM29 and DSP version 08 and above.
ET (15-30kW)/ET G2/ET(40~50kW):
*3. For compatibility, the ET (15~30kW) Series requires ARM07 and DSP version 06 and above.
*4. For compatibility, the ET (15~30kW) 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(15~30kW) series requires ARM 09 and DSP version 08 and above.
*3. ET (15~30kW) matching Lynx Home F G2 Series LX F9.6-H-20 requires ARM09 and DSP08 and above.
*3. Lynx Home F G2 Series LX F6.4-H-20 only supports GW12KL-ET and GW18KL-ET models in the ET (15~30kW) series.

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	-		●	●	●				
	Battery-Box Premium HVM*2	HVM 8.3		●		●	●			
		HVM 11.0	●	●	●	●	●	●	●	
		HVM 13.8	●	●	●	●	●	●	●	
		HVM 16.6	●	●	●	●	●	●	●	
		HVM 19.3	●	●	●	●	●	●	●	
		HVM 22.1	●	●	●	●	●	●	●	
	Battery-Box Premium HVS*2	HVS 5.1	●	●	●	●	●	●	●	
		HVS 7.7	●	●	●	●	●	●	●	
		HVS 10.2	●	●	●	●	●	●	●	
		HVS 12.8	●		●			●	●	
	BATTERYMAX LITE*3	LITE 30								●
		LITE 37.5								●
		LITE 45								●
		LITE 52.5								●
		LITE 60								●
		LITE 67.5								●

*. Including ET Series: ET PLUS+, ET PLUS+ (16A)
**.Including EH Series :EH PLUS
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.
ET15~30kW:
*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, ET30kW 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.
*2. BYD HVM 11.0 is used with ET15~30kW inverters, inverter version must be ARM 09/DSP08 or above.
ET 40~50kW:
*3. ARM firmware versions 08 and above are required for compatibility.

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)
**.Including EH Series :EH PLUS
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.

2) High-voltage Energy Storage Systems

Battery Brand	Battery Series	Battery Model	Inverter Series					
			ET (5-10kW)*	EH**	BT	BH	ET G2	ET (40~50kW)
PYLON	Powercube H1 Series*1	POWERCUBE-H1-48	●	●	●	●		
	Force H1 Series*2	Force-H1	●	●	●	●	●	
	Force H2 Series*3	Force-H2	●	●	●	●	●	
	Force H3 Series*4	Force-H3	●	●	●	●	●	

*. Including ET Series: ET PLUS+, ET PLUS+ (16A)
**.Including EH Series :EH PLUS
ET/EH/BT/BH:
*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.
*3. ARM firmware versions 14 and above are required for compatibility.
*3. 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.
*4. ARM firmware versions 14 and above are required for compatibility. Please note that the nominal voltage of Force H3 Series must be within the Battery Voltage Range of GoodWe inverters. Maximum 4 units for EH/BH, and 5 units for ET/BT.
ET G2:
*4. Please note that the nominal voltage of Force H3 Series must be within the Battery Voltage Range of GoodWe inverters. Maximum 6 units for ET G2.

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	●		●		●	
		Tower T21					●	
	Tower Pro Series*2	Tower Pro TP7					●	
		Tower Pro TP11	●		●		●	
		Tower Pro TP15	●		●		●	
		Tower Pro TP19	●		●		●	
		Tower Pro TP23					●	
	Power Rack-HV4F	Power Rack-HV4F-11s						●
	STACK100*3	STACK100						●

*. Including ET Series: ET PLUS+, ET PLUS+ (16A)
**.Including EH Series :EH PLUS
ET/EH/BT/BH:
*1. ARM firmware versions 10 and above are required for compatibility.
*2. ARM firmware versions 10 and above are required for compatibility.
ET G2:
*1. ARM firmware versions 01 and above are required for compatibility.
*2. ARM firmware versions 01 and above are required for compatibility.
ET 40~50kW:
*3. ARM firmware versions 08 and above are required for compatibility.
Note that ET40~50kW only supports 5~13 modules of STACK100 batteries, the inverter will be damaged if the number of batteries does not match.

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)
**.Including EH Series :EH PLUS
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)
**.Including EH Series :EH PLUS
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.

GoodWe Battery Compatibility Overview-20241223-EN-V029.1 Information may be subject to change without notice.

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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 50kW/BTC 50kW:
*1: EMS firmware versions 02 and above are required for compatibility.
ETC 100kW:
*1. EMS firmware versions 00 and above are required for compatibility.

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
GoodWe	SECU-S[1]	SECU-S13	●	●		
		SECU-S15	●	●		
		SECU-S18	●	●		
		SECU-S20	●	●		
	Lynx Home FH series US[2]	LX F9.6-30	●	●	●	●
		LX F12.8-30	●	●	●	●
		LX F16.0-30	●	●	●	●
		LX F19.2-30	●	●	●	●

A-ES/A-BP:
*1. ARM firmware versions 14 and above are required for compatibility.
ES-US20/SBP-US20:
*2. ARM firmware versions 03 and above are required for compatibility.
A-ES/A-BP:
*2. ARM firmware versions 24 and above and DSP versions 07 and above are required for compatibility.

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[1][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.
ES-US20/SBP-US20
*1. ARM firmware versions 07 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[1][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.