

## ES-US Series

(North America Only) 5-11.4kW  
Split phase I up to 4 MPPTs  
Hybrid inverter (HV)

GoodWe ES-US Series is a split-phase hybrid inverter designed to increase the self-consumption of your generated solar energy. GoodWe ES-US is compatible with high voltage (80-495V) batteries with a power capacity ranging from 5kW to 11.4kW. With up to 4 MPPTs, the ES-US inverter seamlessly adapts to complex residential rooftops. Featured with rapid battery charge function, the series is perfectly capable of whole home backup<sup>1</sup>. Equipped with an optional EV Charger function, the ES-US Series allows vehicles to be charged with self-generated solar power under smart charging management.

1: Automatic Backup Device required.



### Smart Monitoring

- PV string current monitoring
- Smart home integration with multi-protocol communications



### Fully Integrated Design

- Whole home backup
- External auto-transformer is not needed



### Superb Safety & Reliability

- Battery Arc Fault Detection
- DC Type II SPD



### Flexible & Adaptable Applications

- Multiple communication protocols supported
- Fossil fuel generator compatible

Technical Data	GW5000-ES -US20	GW6000-ES -US20	GW7600-ES -US20	GW9600-ES -US20	GW11K4-ES -US20
Battery Input					
Battery Type	Li-Ion				
Nominal Battery Voltage (V)	300				
Battery Voltage Range (V) <sup>1</sup>	80 ~ 495				
Start-up Voltage (V)	80				
Number of Battery Input	1				
Max. Continuous Charging Current (A)	50				
Max. Continuous Discharging Current (A)	50				
Max. Charging Power (W)	5000	6000	7600	9600	11400
Max. Discharging Power (W)	5250	6300	7980	10080	11970
PV Input					
Max. Input Power (W)	7500	9000	11400	14400	17100
Max. Input Voltage (V) <sup>2</sup>	600				
MPPT Operating Voltage Range (V) <sup>3</sup>	50 ~ 550				
Start-up Voltage (V)	60				
Max. Input Current per MPPT (A)	16				
Max. Short Circuit Current per MPPT (A)	23.4				
Number of MPP Trackers	2	2	4	4	4
AC Output (On-grid)					
Nominal Output Power (W)	5000	6000	7600	9600	11400
Nominal Output Voltage (V)	240				
Output Voltage Range (V)	211 ~ 264				
Nominal AC Grid Frequency (Hz)	50 / 60				
AC Grid Frequency Range (Hz)	58.5 ~ 61.2				
Max. AC Current Output to Utility Grid (A)	20.8	25.0	31.7	40.0	47.5
Max. AC Current From Utility Grid With EV Charger(A)	40.0	40.0	40.0	40.0	47.5
Power Factor	~1 (Adjustable from 0.8 leading to 0.8 lagging)				
Max. Total Harmonic Distortion	<3%				
AC Output (Back-up)					
Back-up Nominal Apparent Power (VA)	5000	6000	7600	9600	11400
Max. Output Apparent Power with Grid (VA) <sup>4</sup>	5000 (10000@10sec)	6000 (12000@10sec)	7600 (12920@10sec)	9600 (17280@10sec)	11400 (17280@10sec)
Max. Output Current (A)	20.8	25.0	31.7	40.0	47.5
Nominal Output Voltage (V)	240 / 120				
Nominal Output Frequency (Hz)	60				
Output THDv (@Linear Load)	<3%				
Efficiency					
Max. Efficiency	97.6%				
Protection					
PV String Current Monitoring	Integrated				
PV Insulation Resistance Detection	Integrated				
Residual Current Monitoring	Integrated				
PV Reverse Polarity Protection	Integrated				
Battery Reverse Polarity Protection	Integrated				
Anti-islanding Protection	Integrated				
AC Overcurrent Protection	Integrated				
AC Short Circuit Protection	Integrated				
AC Overvoltage Protection	Integrated				
DC Switch	Integrated				
DC Surge Protection	Type II				
AC Surge Protection	Type III				
AFCI	Integrated				
Battery Arc Fault Detection	Integrated				
Rapid Shutdown	Integrated				
General Data					
Operating Temperature Range	-31°F ~ +140°F (-35°C ~ +60°C)				
Relative Humidity	0 ~ 95%				
Max. Operating Altitude	9842ft (3000m)				
Cooling Method	Natural Convection				
User Interface	LED, APP				
Communication with BMS	RS485, CAN				
Communication with Meter	RS485				
Communication with Portal	LAN (4G Optional) + Bluetooth + WiFi				
Weight (lb)	72.3	72.3	76.7	84.9	84.9
Dimension (W x H x D)	19.1 x 35.4 x 7.5 in (485 x 900 x 191.5 mm)				
Noise Emission (dB)	<20	<20	<40	<40	<40
Topology	Non-isolated				
Self-consumption at Night (W) <sup>5</sup>	<20				
Ingress Protection Rating	NEMA Type 4X				
Mounting Method	Wall Mounted				
Certification					
Grid Interconnection	UL1741 SB, California Rule 21, HECO Rule 14, IEEE 1547, IEEE 1547.1				
Safety Regulations	UL 1741, CSA 22.2 No. 107.1, UL 1998, UL1699B				
Electromagnetic Compatibility	FCC part15 CLASS B				

\*1: Battery discharge / charge power limited by voltage.

\*2: Inverter will not work when PV input voltage  $\geq 585V$ .

\*3: When there is no battery connected, inverter starts feeding in only if string voltage is higher than 200V.

\*4: Can be reached only if PV and battery power is enough.

\*5: No Back-up Output.

\*: Please visit GoodWe website for the latest certificates.



# GOODWE

## Automatic Backup Device

The Automatic Backup Device (ABD) is compatible with the GoodWe ES-US and SBP-US, enabling whole home backup for U.S. households. Its built-in Smart Meter (North America) can be connected with up to 4 CTs, monitoring most of a home's appliances with higher precision than alternatives.



24/7 Whole Home Backup



High precision of load monitoring



Perfect compatibility with ES-US  
& SBP-US



Low voltage ride through

Technical Data		ABD200-40-US10	ABD200-63-US10	ABD100-40-US10	ABD100-63-US10
Electrical Data					
Nominal Output Voltage (V)	240				
Output Voltage Range (V)	211~264				
Feed-in Type	Split Phase				
Nominal AC Voltage of Line Conductor (V)	120 / 240				
Nominal AC Frequency (Hz)	60				
AC Frequency Range (Hz)	56~64				
Current Rating (from Grid)(A)	200				
Max. Continuous Current from Inverter (A)	32	47.5	32	47.5	
Maximum Overcurrent Protection of Main Breaker (A) <sup>*1</sup>	200		100		
Maximum Overcurrent Protection of Circuit Breaker of Inverter (A)	40	63	40	63	
General Data					
Operating Temperature Range	-13°F ~ 140°F (-25°C ~ 60°C) <sup>*2</sup>				
Max. Operating Altitude	9842ft (3000m)				
Cooling Method	Natural Convection				
Communication with Inverter	RS485				
Weight	26lb (12kg)				
Dimension (W × H × D)	17.7 × 24 × 5.9 in (450 × 610 × 150 mm)				
Mounting Method	Wall Mounted				
Ingress Protection Rating	Type 3R, IP44				
Certification & Standards					
Safety Regulation	UL1741, CSA22.2 NO.107-01				
EMC	FCC part15 CLASS B				

\*1: The main breaker is optional.

\*2: Derating temperature: 113°F (45°C).

\*: Please visit GoodWe website for the latest certificates.





GOODWE

# Lynx Home FH-US Series

9.6-19.2kWh | High voltage battery

The GoodWe high-voltage battery Lynx Home FH-US Series is a perfect match for residential energy storage systems in North America. It is compatible with GoodWe ES-US/SBP-US/A-ES/A-BP inverters and offers a wide capacity range from 9.6kWh to 19.2kWh per cluster, providing comprehensive energy storage options to meet demanding project requirements from self-consumption optimization to backup power. The stackable self-detecting modules make the system especially simple to install and maintain. Meanwhile, the reliable lithium iron phosphate (LFP) cell technology ensures maximum safety and a longer life cycle.



## Smart Control

- Remote diagnosis & update
- Auto reboot after undervoltage



## Fully Integrated Design

- Stackable auto-recognition modules
- Plug & Play wiring



## Superb Safety & Reliability

- Reliable LFP technology with high cycle stability
- IP55 protection for outdoor installation safety



## Flexible & Adaptable Applications

- Up to 8 towers in parallel
- Compatible with GoodWe ES-US/SBP-US/A-ES/A-BP inverters

# Lynx Home FH-US Series (HV)

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Technical Data		LX F9.6-30	LX F12.8-30	LX F16.0-30	LX F19.2-30
Usable Energy (kWh) <sup>*1</sup>		9.6	12.8	16.0	19.2
Battery Module		LX F3.2-30: 64V 3.2kWh			
Number of Modules		3	4	5	6
Cell Type		LFP (LiFeO4)			
Nominal Voltage (V)		192	256	320	384
Operating Voltage Range (V)		171 ~ 216	228 ~ 288	285 ~ 360	342 ~ 432
Nominal Dis- / Charge Current (A) <sup>*2</sup>		35			
Nominal Power (kW) <sup>*2</sup>		6.72	8.96	11.20	13.44
Operating Temperature Range (°F)		Charge: +32°F ~ +122°F (0°C ~ +50°C); Discharge: +5°F ~ +122°F (-15°C ~ +50°C)			
Relative Humidity		≤95%			
Max. Operating Altitude (Ft)		≤9842ft (3000m)			
Communication		CAN			
Weight (lb)		300.9lb (136.5kg)	384.7lb (174.5kg)	468.5lb (212.5kg)	552.3lb (250.5kg)
Dimensions (W x H x D in)		23.6 x 29.5 x 15 in (599.4 x 749.3 x 381 mm)	23.6 x 35.6 x 15 in (599.4 x 904.2 x 381 mm)	23.6 x 41.7 x 15 in (599.4 x 1059.2 x 381 mm)	23.6 x 47.8 x 15 in (599.4 x 1214.1 x 381 mm)
Ingress Protection Rating		IP55			
Mounting Method		Ground-Mounted / Wall-Mounted			
Standard and Certification	Safety	UL1973-2018, UL9540A-2019			
	EMC	FCC part 15			
	Transportation	UN38.3			

\*1: Test conditions, 100% DOD, 0.2C charge & discharge at 77±2°F for battery system at beginning life. System Usable Energy may vary with different Inverter.

\*2: Nominal Dis- / Charge Current and power derating will occur related to Temperature and SOC.

\*: Please visit GoodWe website for the latest certificates.