

Power Reserve Energy Storage System

Residential Energy Storage AC and DC-Coupled



10 kWh Model



20 kWh Model

Residential Energy Storage System

The Kohler[®] Power Reserve energy storage system can maintain power to critical items such as refrigerators, computers, TVs, lights, and garage doors when the grid goes down or for autonomous off-grid applications. The system can also provide automated cost saving through energy rate arbitrage and system power flow control.

Models

- KOH10DC-7600
 KOH10AC-7600
- KOH15DC-7600 KOH15AC-7600
- KOH20DC-7600 KOH20AC-7600

Standard Features

- LiFePO₄ battery chemistry
- Up to 11.4 kW solar DC input, 80-500 VDC. 4 MPPTs
- Up to 7.6 kW of continuous power output off-grid
- Outdoor-rated NEMA 3R rated enclosures
- Always connected, cellular (included) and WiFi
- 10-Year limited warranty, industry best throughput, 70% SOC

Operating Modes

- Backup
- Time- of- Use
- Self-Supply

Communication

• WiFi, LTE-M

Performance Specifications, AC Models

Model	KOH10AC	KOH15AC	KOH20AC	
Battery Input Data	·			
Usable Capacity(kWh)	10	15	20	
Battery Type	LiFePO ₄ (LFP)			
Battery Voltage Range (V)	102.4 (89.6-115.2)	153.6 (134.4-172.8)	204.8 (179.2-230.4)	
Max. Charging Current (A)		50		
Max. Discharging Current (A)		50		
AC Output Data (On- Grid)				
Output Voltage Range (VAC)		211 to 264 @ 240		
Nominal Output Frequency (Hz)		60		
Max Output to Grid (W)	5760	7600	7600	
Max Output from Grid (W)	5760	9120	9120	
Continuous Output @240V (W)	5120	7600	7600	
Continuous Output to Grid (A)	20.8	31.7	31.7	
AC Output Data (Back-Up)		1		
Nominal Output Voltage		120/240		
Continuous Output @240V (W)	5760	7600	7600	
Peak Output @240V (W)	5760, 60 sec.	8460, 60 sec.	9120, 60 sec.	
PV String Input Data				
Max AC Input Power (W)		7600		
Efficiency				
PV Max. Efficiency	97.6%			
CEC Efficiency	96.1%			
Battery Charged by PV, Max. Efficiency	98.1%			
Battery Charge/Discharge to AC, Max.		96.6%		
Efficiency				
General Data		000 to 550 0 / 40 to 4040	Γ\	
Operating Temperature Range Relative Humidity Operating	- 20° to 55° C (- 4° to 131° F)			
Altitude	0- 95% 3000m			
Noise (dB)	<45			
Operating Modes	Backup, TOU, Self-Supply			
Rating	NEMA 3R			
Standby Self- Consumption (W)	<20			
Communication Protocol	Modbus / CAN			
Cycle Life	6,000 at 100% DOD			
DC Protection	Main Contactor / Fuse			
Mounting	Wall and Floor Mount			
-	(battery enclosure feet must rest on the floor)			
† MPPT = Maximum Power Point Tracking				

Performance Specifications, DC Models

Model	KOH10DC	KOH15DC	KOH20DC	
Battery Input Data				
Usable Capacity(kWh)	10	15	20	
Battery Type		LiFePO ₄ (LFP)		
Battery Voltage Range (V)	102.4 VDC	153.6 VDC	204.8 VDC	
, 3 3 ()	(89.6-115.2 VDC	(134.4-172.8 VDC)		
Max. Charging Current (A)	`	50		
Max. Discharging Current (A)	50			
AC Output Data (On-Grid)	<u> </u>			
Output Voltage Range (VAC)		211 to 264 @ 240		
Nominal Output Frequency (Hz)		60		
Max Output to Grid (W)	7600 *	7600	7600	
Max Output from Grid (W)	9120 *	9120	9120	
Continuous Output to Grid (A)	20.8	31.7	31.7	
AC Output Data (Back-Up)	20.8	31.7	31.7	
Nominal Output Voltage, L-N, L1-L2 (VAC)		100/040		
Continuous Output @240V (W)	5120	120/240 7600	7600	
Peak Output @240V (W)				
1 - ()	5760, 60 sec	8640, 60 sec	9120, 60 sec	
PV String Input Data	11.100			
Max DC Input Power (W)		11400		
Max DC Input Voltage (V)		600		
MPPT Range (V) †		80-550		
Start- up Voltage (V)	95			
MPPT Range for Full Load (V) †	230-500			
Nominal DC Input Voltage (V)		380		
Max. Input Current (A)		12.5		
Max. Short Current (A)		15.2		
MPP Trackers (quantity) †		4		
Efficiency		07.00/		
PV Max. Efficiency		97.6%		
PV CEC Efficiency		97.2%		
Battery Charged by PV, Max. Efficiency Battery Charge/Discharge to AC, Max. Efficiency		98.1%		
General Data		96.6%		
Operating Temperature Range	- 2	0° to 55° C (- 4° to 13	1° F\	
Relative Humidity Operating	- 2	0-95%		
Altitude		3000m		
Noise (dB)		<45		
Communication (Built- in)	4G C	4G Cellular Communication, WiFi		
Operating Modes	Backup, TOU, Self-Supply			
Rating	NEMA 3R			
Standby Self-Consumption (W)	<20			
Communication Protocol		Modbus / CAN		
Cycle Life	6,000 at 100% DOD			
DC Protection	Main Contactor / Fuse			
Mounting	Wall and Floor Mount			
3	(battery enclosure feet must rest on the floor)			

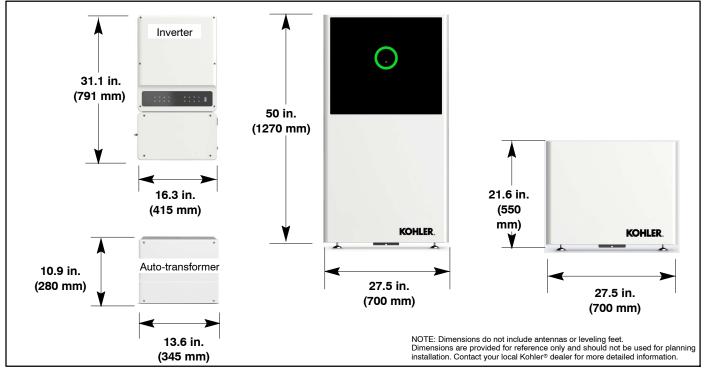
[†] MPPT = Maximum Power Point Tracking



KOHLER CO., Kohler, Wisconsin 53044 USA Phone 920-457-4441, Fax 920-459-1646 For the nearest sales and service outlet in the US and Canada, phone 1-800-544-2444 KOHLERPower.com

Product Specifications

Weights and Dimensions (AC and DC)				
Model, kWh	10	15	20	
Weight	240 kg (530 lb)	329 kg (725 lb)	420 kg (925 lb)	
Size, Battery Enclosure	700 x 1270 x 230 mm	1524 x 1270 x 230 mm	1524 x 1270 x 230 mm	
	(27.5 x 50 x 9 in.)	(60 x 50 x 9 in.)	(60 x 50 x 9 in.)	
Size, Inverter	41	415 x 791 x 175 mm (16.3 x 31.1 x 6.9 in.)		
Size, Auto-transformer	34	345 x 275 x 175 mm (13.6 x 10.9 x 6.9 in.)		



Compliance

Inverter	
Grid Regulation	UL1741 SA (CA Rule 21), UL9540, HECO Rule 14, IEEE 1547, IEEE 1547.1, CSA 22.2
Safety Regulation	UL 1741, CSA 22.2 No. 107-01, UL 1998, UL1699B
EMC	FCC Part 15 Class B
Battery	
Battery	UL 1973, UL 1642
Energy Storage System	UL9540
Communication Protocol	Open ADR 2.0b, Open ADR

Availability is subject to change without notice. Kohler Co. reserves the right to change the design or specifications without notice and without any obligation or liability whatsoever. Contact your local Kohler® Power Systems dealer for availability.

Battery Performance Specifications

Battery Input Data	
Usable Capacity	10, 15, 20 kWh
Initial Capacity (nominal)	2.56 kWh per pack
Battery Chemistry	LiFePO4 (LFP)
Max Charge Current	50 A
Max Discharge Current	50 A
Efficiency	
Battery Charged by PV Efficiency	98.10%
Battery Round Trip Efficiency	96.60%

DISTRIBUTED BY:		

© 2021 Kohler Co. All rights reserved.