

# Kohler PW 1000 (800 VA–20 kVA)

## Technical Specification



**KOHLER POWER**  
uninterruptible

# Kohler PW 1000/LT (UPS 10–50 kVA)

Model	800 VA/360 W	1500 VA/600 kW	2200 VA/1200 W
<b>Input</b>			
Voltage range	160 VAC ~ 290 VAC	160 VAC ~ 290 VAC	
Frequency range	45 Hz~65 Hz (auto sensing)	45 Hz~65 Hz (auto sensing)	
<b>Output (AC mode)</b>			
AVR Regulation	Increase output 15% (input -9% ~ -25%); decrease output 15% (input +9% ~ +25%)		
<b>Output (inverter mode)</b>			
Voltage	220/230/240 VAC +/- 10%		
Frequency	50/60 Hz +/- 1 Hz		
Waveform	Simulated sine wave		
Capacity	800 VA	1500 VA	2200 VA
Transfer time	2~6 minutes typical		
Back-up time	5~30 minutes depending on typical IT load		
<b>Battery</b>			
Voltage	12 VDC		24 VDC
Type	Sealed maintenance-free lead acid VRLA type		
Capacity	12 V/7 Ah		12 V/9 Ah
Recharge time	4~6 hours (to 90%)		
<b>Display</b>			
LED (standard)	3 LEDs for line mode, battery mode and fault	6 LEDs for line mode, battery mode, fault, load % and battery capacity	
<b>Protection</b>			
Overload AC mode	>100% Input fuse blown and buzzer continuously sounds		
Overload inverter mode	>100% Buzzer continuously sounds until battery cut-off		
Short circuit	Shuts down immediately		
Modem (optional)	RJ11		
Network (optional)	RJ45		
<b>Environment</b>			
Operation temperature	0~40°C/32~104°F		
Operation humidity	95% RH maximum (non-condensing)		
Altitude	1000 m/3280 ft without derating		
Noise level	≤40 dBA		
<b>Interface</b>			
Type	Standard: USB communication; optional: RS-232 communication		
Compatible platforms	Microsoft Windows Series, Linux, Mac, etc.		
<b>Standards and certifications</b>			
Safety	EN62040-2		
EMC/surge standard	EN61000-3-2, EN61000-3-3		
Certification	CE		
<b>Other</b>			
Alarm	Battery mode – buzzer sounds every 1 second; battery low – buzzer sounds every 0.1 second		
Dimensions (cm) W x D x H	100 × 140 × 292	148 × 198 × 315	
Weight (kg)	4.5 kg	8 kg	12 kg
Output connections	4 x IEC320 outlets or 3 x universal outlets	6 x IEC320 outlets or 4 x universal outlets	

# Kohler PW 1000/OT (UPS 10–50 kVA)

Model	1 kVA/900 W	2 kVA/1.8 kW	3 kVA/2.7 kW	6 kVA/5.4 kW	10 kVA/9 kW	15 kVA/13.5 kW	20 kVA/18 kW
<b>Input</b>							
Phase	Single + G			1Φ, line+ neutral+ground	1Φ, line+ neutral+ground; 3Φ, R,S,T + neutral+ground	3Φ, R,S,T + neutral+ground	
Voltage range	110–300 VAC			110–280 VAC (1Φ)	110–280 VAC (1Φ) / 277–485 VAC (3Φ)	277–485 VAC (3Φ)	
Frequency range	44–66 Hz (auto sensing)				45–65 Hz		
Input power factor	>0.99 @ 100% linear			Up to 0.99 (1Φ) / 0.95 (3Φ) at linear load			
<b>Output</b>							
Voltage	200/208/220/230/240 VAC						
Capacity	900 W	1800 W	2700 W	5400 W	9000 W	13500 W	18000 W
Power factor	0.9						
Voltage distortion	<3% @100% linear load, 7% @100%non-linear load			<3% @100% linear load			
Voltage regulation	±1%						
Frequency range	44–66 Hz (auto sensing)			±1 Hz or ±3 Hz (selectable battery mode)			
Crest factor	3.1						
Output waveform	Pure sine wave						
<b>Efficiency</b>							
Line mode	Up to 92%						
High efficiency mode	Up to 96.5%						
<b>Battery</b>							
Capacity	12 VDC/7 Ah		12 VDC/9 Ah	12 VDC/5 Ah or 12 VDC/7 Ah	12 VDC/9 Ah VDC	NA	
Battery number	3	6	6	20			
Battery voltage	36 VDC	72 VDC	72 VDC	240 VDC			
<b>Display</b>							
LCD	Voltage/frequency/load level/output current/estimated autonomy						
Self-diagnostics	Upon power-on, front panel setting and software control, 24-hours routine checking						
<b>Environmental</b>							
Operation temperature	0–40°C/32–104°F						
Operation humidity	20–95% RH (without condensing)			20–90%RH (without condensation)			
Altitude	1000 m/3280 ft without derating						
Noise level	≤50 dBA @ 1 metre front			≤50 dBA		≤60 dBA	
<b>Interface</b>							
Type	Standard RS-232, EPO			Standard RS-232		Standard RS-232, EPO	
Communication slots	USB, dry contact relay, SNMP/WEB card			2nd RS232, USB, RS485, relay contact, SNMP/WEB card, etc			
Compatible platforms	Microsoft Windows series, Linux, Mac, etc						
<b>Standards and certifications</b>							
Safety	EN62040-1, UL1778					EN62040-1-1	
EMC	EN62040-2, EN61000-3-3, EN61000-3-3, FCC class A					EN62040-2	
Certification	CE						
<b>Other</b>							
Audible or visual alarm	Line failure/battery low/transfer to bypass/system fault						
Protection	Overload, over temperature, short circuit, discharge, overcharge						
Function: multi mode	Normal/ECO/CVCF						
Function: DC start	Yes			Up to 90% (line mode)		Up to 90% (without transformer)	
Dimensions (cm) W x D x H	154 x 211 x 383	192 x 250 x 470	192 x 250 x 525	290 x 645 x 748			
Weight (kg)	11	23	25	86	96	60	

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Model	BT06036X	BT12072X
<b>Extended battery cabinets</b>		
Number of batteries	6	12
Battery type	Lead acid maintenance free 12V 7 Ah/9 Ah	
Dimensions (mm) W x D x H	154 x 258.7 x 404	192 x 320 x 553

# Kohler PW 1000/ORM (UPS 10–50 kVA)

Model	1 kVA/900 W	2 kVA/1.8 kW	3 kVA/2.7 kW	6 kVA/5.4 kW	10 kVA/9 kW	15 kVA/13.5 kW	20 kVA/18 kW
<b>Input</b>							
Phase	Single + G			160–280 VAC	1Φ, line+ neutral+ground; 3Φ, R,S,T + neutral+ground	3Φ, R,S,T + neutral+ground	
Voltage range	110–300 VAC			110–280 VAC (1Φ)	110–280 VAC (1Φ) / 277–485 VAC (3Φ)	277–485 VAC (3Φ)	
Frequency range	44–66 Hz (auto sensing)						
Input power factor	>0.99 @ 100% linear load			>0.99 (1Φ) / 0.95 (3Φ) at linear load		Up to 0.95 at linear load	
<b>Output</b>							
Voltage	200/208/220/230/240 VAC						
Capacity	900 W	1800 W	2700 W	5400 W	9000 W	13500 W	18000 W
Power factor	0.9						
Harmonic distortion	<3% @100% linear load, 7% @100% non-linear load			<3% at linear load			
Voltage regulation	±2%						
Frequency range	±1 Hz or ±3 Hz (selectable)			±1 Hz or ±3 Hz (selectable battery mode)			
Crest factor	3.1						
Output waveform	Pure sine wave						
<b>Efficiency</b>							
Line mode	Up to 92%						
High efficiency mode	Up to 96.5%			90%		91%	
<b>Battery</b>							
Capacity	12 VDC/7 Ah		12 VDC/9 Ah		12 VDC/7 Ah		12 VDC/9 Ah
Number of batteries	2/3	4/6	6	8	20		
Battery voltage	36 VDC	72 VDC	72 VDC	96 VDC	240 VDC		
<b>Display</b>							
Status on LED + LCD	Line mode, back-up mode, eco mode, bypass supply, battery low, battery fault/disconnect, overload, and transferring with interruption and UPS fault						
LCD	Voltage, frequency, load level, battery level, output current, and estimated autonomy						
Self-diagnostics	Upon power-on, front panel setting and software control, 24-hour routine check						
<b>Environmental</b>							
Operation temperature	0–40°C/32–104°F						
Operation humidity	20–95% RH (without condensing)						
Altitude	1000m/3280ft without derating						
Noise level	≤50 dBA @ 1 metre front			≤50 dBA		≤60 dBA	
<b>Interface</b>							
Type	Standard RS-232, EPO			Standard RS-232		Standard RS-232, EPO	
Communication slots	USB, dry contact relay, SNMP/WEB card			2nd RS-232, USB, RS-485, relay contact, SNMP/WEB card, etc			
Compatible platforms	Microsoft Windows series, Linux, Mac, etc						
<b>Standards and certifications</b>							
Safety	EN62040-1, UL1778					EN62040-1-1	
EMC	EN62040-2, EN61000-3-3, EN61000-3-3, FCC class A					EN62040-2	
Certification	CE						
<b>Other</b>							
Audible or visual alarm	Line failure, battery low, transfer to bypass, system fault conditions						
Protection	Overload, over temperature, short circuit, discharge, overcharge						
Function: multi mode	Normal/ECO/CVCF						
Function: DC start	Yes						
Dimensions (cm) W x D x H	440 x 88 x 405	440 x 88 x 600		290 x 645 x 748	440 x 20 x 680	440 x 30 x 680	440 x 50 x 680
Weight (kg)	12	23	25	31	24	30	42



**KOHLER** POWER  
uninterruptible

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