

**OST 6000HB-60
OST 5000HB-120
OST 6000HB-120**



SUPERIOR EFFICIENCY

Max efficiency 97.3%, battery efficiency 94.3%

Max. Charge/Discharge current 120A

Reasonable energy control to increase the proportion of spontaneous use

HIGH RELIABILITY

With BMS system to ensure high battery life

Natural cooling design

INTELLIGENT MAINTENANCE

Compatible with lead-acid batteries and lithium battery energy storage systems

Remote configuration and upgrade



CERTIFICATIONS OBTAINED



FOR OTHER VERSIONS:
Please consult ONESTO or local distributor.

Model	OST 5000HB-60	OST 5000HB-120	OST 6000HB-120
Efficiency			
Max. efficiency (PV to AC)		97.3%	
Max. efficiency (BAT to AC)		94.3%	
Input (PV)			
MAX PV Power		9000W	
Max PV voltage		550V	
Max input current (input A/input B)		15A/15A	
Max short current (input A/input B)		20A/20A	
Start operating voltage		90V	
MPPT voltage range		70V-520V	
No. of MPPT trackers		2	
String per MPP tracker		1	
Input (BAT)			
Compatible battery type		Lithium-ion / Lead-acid	
Nominal battery voltage		48V	
Battery voltage range		40V-65V	
Max. charge/discharge current	60A/60A	120A/120A	120A/120A
Max. charge/discharge power	3000W/3000W	6000W/6000W	6000W/6000W
Lithium battery charge curve		Self-adaption to BMS	
Output (Grid)			
Nominal AC output power	5000W	5000W	6000W
Max. AC output apparent power	5500VA	5500VA	6000VA
Max. AC output power (PF=1)	5500W	5500W	6000W
Max. AC output current	25A	25A	27.2A
Rated AC voltage		230V.L+N+PE	
AC voltage range		150V-300V (Adjustable)	
Rated grid frequency		50Hz/ 60Hz	
AC frequency range		45Hz-55Hz/55Hz-65Hz(Adjustable)	
Grid connection		Single phase	
Power factor		> 0.99 @rated power (Adjustable 0.8 LD - 0.8 LG)	
THDI		<3% (Rated Power)	
Output (Back up)			
Nominal output voltage		230V.L+N+PE	
Nominal output frequency		50Hz/ 60Hz	
Nominal output power	3000W	5000W	6000W
Nominal output current	13A	21.7A	26A
Transfer time		10ms (typ) / 20ms (max)	
THDV		<3% @100% R Load	
Protection			
Protection category		Class I	
DC switch		Support	
Anti-islanding protection		Support	
AC overcurrent protection		Support	
AC short circuit protection		Support	
DC reverse connection		Support	
Surge Arrester		DC Type III, AC Type III	
Insulation detection		Support	
Leakage current protection		Support	
PV overvoltage category		II	
AC overvoltage category		III	
Gen		Optional	
General			
Max. operation altitude		4000m	
Noise emission		<35dB	
Ingress protection degree		IP65	
Operating temperature range		-25°C to +60°C	
Relative humidity		0~100%	
Cooling concept		Natural Cooling	
Mounting		Wall bracket	
Dimensions (W*H*D)		515mm*485mm*175mm	
Weight	20kg	25kg	25kg
PV connection way		MC4/H4	
Battery connection way		Dedicated DC connector	
AC connection way (grid & back up)		Dedicated AC connector	
HMI & COM			
Display		LED+APP	
Communication interface		RS485/CAN (for BMS), RS485, USB, DRM/RS485 (for Meter), Optional: WIFI/GPRS/LAN	
Certification			
Grid / EMC		IEC 61000-1/2/3/4, G99, NRS 097, EN 50549-1, IEC 61727/62116, CEI 021	
Safety		IEC 62109-1/2	
Warranty		5 Years	

Remarks: The range of output voltage and frequency may vary depending upon different grid codes. Specifications are subject to change without advance notice.

**OST 8KHB-180
OST 10KHB-210**



SUPERIOR EFFICIENCY

Max efficiency 98.0%, CEC efficiency 95%

Max. PV Power 15KW

String current 30A, compatible with high power modules

Advanced parallel, up to 9 pcs

HIGH RELIABILITY

Configure BMS management system to ensure high battery life

INTELLIGENT MAINTENANCE

Compatible with lead-acid batteries and lithium battery energy storage systems

Remote configuration and upgrade



CERTIFICATIONS OBTAINED



FOR OTHER VERSIONS:
Please consult ONESTO or local distributor.

Model	OST 8KHB-180	OST 10KHB-210
Efficiency		
Max. Efficiency (PV To AC)	98.0%	
Max. Efficiency (Bat To AC)	95.0%	
Input(PV)		
Max. PV Power	12000W	15000W
Max. Input Voltage	600V	
Max. Input Current (PV-A/PV-B)	30A/22A/22A	
Max short current (input A/input B) (A)	40A/30A/30A	
Start operating voltage (V)	90V	
MPPT Operating Voltage Range	70V-540V	
No.of MPPT trackers	3	
String per MPP tracker	2	
Input (BAT)		
Compatible battery type	Lithium-ion/Lead-acid	
Nominal battery voltage	48V	
Battery voltage range	40V-64V	
Max. charge/discharge current	210A/180A	210A/210A
Max. charge/discharge power	10000W/8000W	10000W/10000W
Lithium battery charge curve	Self-adaption to BMS	
Input (Grid)		
Nominal AC input power	12000W	15000W
Max. AC input current	52.5A	65.3A
Rated AC voltage	230V (Single phase)	
Output (Grid)		
Nominal AC output power	8000W	10000W
Max. AC output apparent power	8800VA	11000VA
Max.AC output power (PF=1)	8800W	11000W
Max. AC output current	40A	50A
Rated AC voltage	230V, L+N+PE	
Rated grid frequency	50Hz / 60Hz	
Grid connection	Single phase	
Power factor	> 0.99 @rated power (adjustable 0.8 LD - 0.8 LG)	
THDI	<3% (Rated Power)	
Output (BackUp)		
Nominal output power	8000W	10000W
Nominal output voltage	230V, L+N+PE	
Nominal output frequency	50/60Hz	
Nominal output current	34.8A	43.5A
Maximum power(1s)	16000VA	20000VA
Nominal output voltage	230V, L+N+PE	
Nominal output frequency	50Hz / 60Hz	
Transfer time	10ms (typ) / 20ms (max)	
THDV	<3% @100% R Load	
Protection		
Protection category	Class I	
DC switch	Support	
Anti-islanding protection	Support	
AC overcurrent protection	Support	
AC short circuit protection	Support	
DC reverse connection	Support	
Surge Arrester	DC Type II, AC Type II	
Insulation detection	Support	
Leakage current protection	Support	
Gen	Support	
PV overvoltage category	II	
AFCI	Optional	
RSD	Optional	
General		
Max. operation altitude	4000m	
Noise emission	<45dB	
Ingress protection degree	IP65	
Operating temperature range	-25~60°C(>45°C derating)	
Relative humidity	0~100%	
Cooling concept	Fan Cooling	
Mounting	Wall bracket	
Dimensions (W*H*D)	420mm*800mm*240mm	
Weight (kg)	37Kg	
PV connection	Terminals	
BAT connection	DC special connector	
HMI & COM		
Display	LED	
Communication interface	RS485/CAN (for BMS), DRM/RS485 (for Meter), RS485, USB, Optional: WIFI/GPRS/LAN	
Certification		
Grid	NRS 0-97 / IEC61727 / IEC62116	
Safety/EMC	IEC62109 / EN 61000	
Warranty	5 Years	

Remarks: The range of output voltage and frequency may vary depending upon different grid codes.
Specifications are subject to change without advance notice.

**OST 5000HB-T
OST 6000HB-T
OST 8000HB-T
OST 10000HB-T**



SUPERIOR EFFICIENCY

Max efficiency 98.4%, Battery efficiency 98%

Max. Charge/Discharge Current 50A

Reasonable energy control to increase the proportion of spontaneous use

HIGH RELIABILITY

With BMS system to ensure high battery life

Natural cooling design

INTELLIGENT MAINTENANCE

Compatible with lead-acid batteries and lithium battery energy storage systems

Remote configuration and upgrade



CERTIFICATIONS OBTAINED



FOR OTHER VERSIONS:
Please consult ONESTO or local distributor.

Model	OST 5000HB-T	OST 6000HB-T	OST 8000HB-T	OST 10000HB-T
Efficiency				
Max. efficiency (PV to AC)	98.2%		98.4%	
Max. efficiency (PV to AC)	97.2%		97.9%	
Max. efficiency (BAT)	98.0%			
Input (PV)				
MAX PV Power	9000W		15000W	
Max PV voltage	1000V			
Max input current (input A/input B)	15A/15A		20A/30A	
Max short current (input A/input B)	20A/20A		30A/40A	
MPPT voltage range	160V-950V			
No. of MPPT trackers			2	
String per MPP tracker	1+1		1+2	
Input (BAT)				
Compatible battery type	Lithium-ion / Lead-acid			
Nominal battery voltage	200V-600V			
Battery voltage range	150V-600V			
Max. charge/discharge current	25A/25A	25A/25A	50A/50A	50A/50A
Max. charge/discharge power	9000W/5800W	9000W/7000W	15000W/9300W	15000W/10500W
Lithium battery charge curve	Self-adaption to BMS			
Output (Grid)				
Nominal AC output power	5000W	6000W	8000W	10000W
Max. AC output apparent power	5500VA	6600VA	8800VA	11000VA
Max. AC output power (PF=1)	5500W	6600W	8800W	11000W
Max. AC output current	3*8.3A	3*10A	3*13.3A	3*16.7A
Max. Single Phase power	2.5kW	3kW	4kW	5kW
Max. Current (Output)	11.5A	13.7A	18.2A	22.7A
Apparent Power (Input)	15kVA			
Maximum Current (Input)	3*25A			
Rated AC voltage	380V / 400V / 415V, 3W+N+PE			
AC voltage range	277V-520V (Adjustable)			
Rated grid frequency	50Hz / 60Hz			
AC frequency range	45Hz-55Hz/55Hz-65Hz (Adjustable)			
Grid connection	Three phase			
Power factor	>0.99 @rated power (Adjustable 0.8 LD - 0.8 LG)			
THDI	<3% (Rated Power)			
Output (Back up)				
Nominal output power	5000W	6000W	8000W	10000W
Nominal output current	3*7.6A	3*9.1A	3*12.2A	3*15.2A
Max. single phase power	2.5kW	3kW	4kW	5kW
Max. single phase current	11.5A	13.7A	18.2A	22.7A
Maximum power(5min)	6000VA	7200VA	9600VA	12000VA
Maximum power(10s)	7500VA	9000VA	12000VA	15000VA
Nominal output voltage	380V / 400V, 3W+N+PE			
Nominal output frequency	50Hz / 60Hz			
Transfer time	10ms (typ) / 20ms (max)			
THDV	<3% (R Load), 5% (RCD Load)			
Protection				
Anti-islanding protection	Support			
AC overcurrent protection	Support			
AC short circuit protection	Support			
AC over-voltage protection	Support			
Surge Arrester	DC Type II, AC Type II			
Insulation detection	Support			
GFCI	Support			
AFCI	Optional			
RSD	Optional			
General				
Max. operation altitude	4000m (>2000m derating)			
Noise emission	30dB			
Ingress protection degree	IP65			
Operating temperature range	-25°C to +45°C			
Relative humidity	0~100%			
Cooling concept	Natural Cooling			
Mounting	Wall bracket			
Dimensions (W*H*D)	530mm*550mm*212mm			
Weight	30kg			32kg
PV connection way	MC4/H4			
Battery connection way	Dedicated DC connector			
HMI & COM				
Display	LED+APP			
Communication interface	CAN/RS485 (BMS), DRM/RCD (DI) / RS485 (Meter) 1*DO, USB (Firmware upgrade), Optional: WiFi/GPRS/4G/Ethernet			
Certification				
Grid	IEC 61727/62116, EN 50549-1, VDE 4105, CEI 0-21, G99			
Safety / EMC	IEC62109-1&2 / EN 61000			
Warranty	5 Years			

Remarks: The range of output voltage and frequency may vary depending upon different grid codes. Specifications are subject to change without advance notice.