

ONESTO[®]

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PHOTOVOLTAIC INVERTER

**QUALITY
HAS A NAME.**



HYBRID
INVERTER



MPPT
INVERTER



ENERGY
STORAGE BATTERY

2022-2023

ONESTO[®]



Company Profile

As an active player in electrical manufacturing industry over 15 years, **ONESTO** is committed to providing quality assured products for application in power distribution, industrial control and new energy etc.

ONESTO is a name of quality that focuses on customer's safety and satisfaction. The company is operated under ISO9001:2015 Quality Management System. All the products are manufactured in conformity with BE,EN,IEC international standards and acquired CE,CB,TUV,Semko, KEMA-KEUR certificates.

ONESTO is undertaking intelligent manufacturing. The factory set up advance automated assembly and testing production line to secure high precision parts dimension, accurate automated assembly, outstanding technical performance and efficient production capacity. Onesto introduced advance ERP system to achieve full quality tracing for each step of raw material incoming, production process and delivery.

ONESTO always pursues constant product innovation to offer customers with comprehensive selection for commercial, industrial, residential project where quality is essential. Onesto owns independent intellectual property rights for its product range including domestic and international patents.

Today, customers over 50 countries are benefited from **ONESTO** products and solution for its reliable protection of electrical systems. As a well recognized partner with renowned companies around the world, **ONESTO** is ready to create new value and competitive advantages with partners for mutual continuously development.

Factory Tour



Inverter & Battery for Photovoltaic Systems

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- **SINGLE PHASE AC COUPLED & HYBRID INVERTER**
- **SINGLE PHASE & THREE PHASE INVERTER**
- **ENERGY STORAGE BATTERY**



- Aluminum enclosure with top-ranking high quality components
- Intelligent active monitoring system to provide real-time response and remote trouble shooting
- Extreme low operating voltage, self-studying MPPT technology and patented ECO mode to increase power generation

TÜV CE



OST 5KAC

SINGLE PHASE AC COUPLED INVERTER



HIGH YIELD

Max Charge/Discharge efficiency 95%

Convenient to retrofit existing grid-connected systems and 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

| Model | OST 5KAC |
|--|--|
| Efficiency | |
| Max. Efficiency | 95% |
| Input (Battery) | |
| Battery Type | Lithium-ion / Lead-Acid |
| Nominal Battery Voltage | 48V |
| Battery Voltage Range | 42-60V |
| Max. Charge / Discharge Current | 100A |
| Lithium-ion Battery Charge Curve | Self-adaption to BMS |
| Lead-Acid Battery Charge Curve | 3 stages |
| Output (Grid) | |
| Rated AC Active Power | 5000W |
| Max.Ac Active power | 5500W |
| Rated AC Voltage | 230V |
| Max. AC Current Output to Utility Grid (A) | 23.8A |
| AC Voltage Range ^① | 180V-275V (Adjustable) |
| Rated Grid Frequency | 50Hz / 60Hz |
| Grid Frequency Range ^② | 45-65Hz (Adjustable) |
| THDI | <3% (Rated Power) |
| Power Factor | > 0.99 Rated power (Adjustable 0.8 Leading – 0.8Lagging) |
| Output (EPS) | |
| Nominal Output Power | 5000VA |
| Nominal Output Voltage | 230V |
| Nominal Output Frequency | 50Hz / 60Hz |
| THDV | <3% @100% R Load |
| Switching Time (Typical) | 10ms |
| Protection | |
| Anti-islanding protection | Support |
| AC overcurrent protection | Support |
| AC short circuit protection | Support |
| Insulation detection | Support |
| Leakage current protection | Support |
| General | |
| Topology | High Frequency Isolation |
| IP Rating | IP65 |
| Cooling | Natural cooling |
| Operating Temperature Range | -25°C-60°C |
| Relative Humidity Range | 0-100% |
| Max. Operating Altitude | 4000m |
| Noise(Typical) | <30dB |
| Dimensions (W*H*D) | 515*500*175mm |
| Weight | 28Kg |
| HMI & COM | |
| Display | LED&APP |
| Communication | RS485, CAN, WIFI / GPRS / 4G (optional) |
| Certification | |
| Safety | IEC62477-1, IEC62040-1 |
| Grid Code | AS / NZS 4777.2, IEC 61727 / 62116, VDE4105-AR-N, EN 50549 |
| Warranty | 5 Years / 10 Years (Optional) |

Remarks: ^{①②}The range of output voltage and frequency may vary depending upon diereent grid codes. Specifications are subject to change without advance notice.



FOR OTHER VERSIONS:
Please consult ONESTO or local distributor.

OST 5000HB 60 / 100

SINGLE PHASE HYBRID INVERTER



HIGH YIELD

Max efficiency 97.6% ,European efficiency 97.3%

Max. Charge / Discharge Current 100A

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

| Model | OST 5000HB-60 | OST 5000HB-100 |
|--|---|----------------|
| Efficiency | | |
| Max. Efficiency (PV to Grid) | 97.6% | |
| European Efficiency | 97.3% | |
| Max. Efficiency (Battery to Load) | 95% | |
| Input (PV) | | |
| Max. Input Voltage | 550V | |
| Rated Input Voltage | 360V | |
| Max. Input Current | 13A | |
| Max.Short Circuit Current | 15A | |
| Start Input Voltage | 90V | |
| MPPT Operating Voltage Range | 70V-540V | |
| Max. Number of PV Strings | 2 | |
| No. of MPPTs | 2 | |
| Input (Battery) | | |
| Battery Type | Lithium-ion / Lead-Acid | |
| Nominal Battery Voltage | 48V | |
| Battery Voltage Range | 42-60V | |
| Max. Charge / Discharge Current | 60A | 100A |
| Lithium-ion Battery Charge Curve | Self-adaption to BMS | |
| Lead-Acid Battery Charge Curve | 3 stages | |
| Output (Grid) | | |
| Rated AC Active Power | 5000W | |
| Max.Ac Active power | 5500W | |
| Rated AC Voltage | 230V | |
| AC Voltage Range ^① | 180V-275V (Adjustable) | |
| Rated Grid Frequency | 50Hz / 60Hz | |
| Grid Frequency Range ^② | 45-65Hz (Adjustable) | |
| Max. AC Current Output to Utility Grid (A) | 23.8A | |
| THDI | <3% (Rated Power) | |
| Power Factor | > 0.99 Rated power (Adjustable 0.8 Leading - 0.8Lagging) | |
| Output (EPS) | | |
| Nominal Output Power | 3600VA | 5000VA |
| Nominal Output Voltage | 230V | |
| Nominal Output Frequency | 50Hz / 60Hz | |
| THDV | <3% @100% R Load | |
| Switching Time (Optional) | 10ms | |
| Protection | | |
| DC switch | Support | |
| Anti-islanding protection | Support | |
| AC overcurrent protection | Support | |
| AC short circuit protection | Support | |
| DC reverse connection | Support | |
| Surge Arrester | AC Type III, DC Type III (optional) | |
| Insulation detection | Support | |
| Leakage current protection | Support | |
| Anti-islanding protection | Support | |
| General | | |
| Topology | High Frequency Isolation | |
| IP Rating | IP65 | |
| Cooling | Natural cooling | |
| Operating Temperature Range | -25°C-60°C | |
| Relative Humidity Range | 0-100% | |
| Max. Operating Altitude | 4000m | |
| Noise (Typical) | <30dB | |
| Dimensions (W*H*D) | 515*500*175mm | |
| Weight | 28Kg | |
| HMI & COM | | |
| Display | LED & APP | |
| Communication | RS485, CAN, WIFI / GPRS / 4G (optional) | |
| Certification | | |
| Safety | IEC62109-1&2, IEC62040-1 | |
| Grid Code | AS / NZS 4777.2:2015, IEC 61727 / 62116, VDE4105-AR-N, EN 50549 | |
| Warranty | 5 Years / 10 Years (Optional) | |

Remarks: ^{①②}The range of output voltage and frequency may vary depending upon dierent grid codes. Specifications are subject to change without advance notice.



FOR OTHER VERSIONS:
Please consult ONESTO or local distributor.

OST 2/3/3.6KTL-S1

SINGLE PHASE & SINGLE MPPT



SUPERIOR EFFICIENCY

Maximum efficiency 97.8%
 String Current 13A, compatible with high Power modules
 150% PV configuration, 110% output overload

HIGH RELIABILITY

IP65 waterproof and dustproof, C5 anti-corrosion
 Compatible with wide power grid voltage and high harmonic power grid environment
 DC /AC SPD optional, AFCI detection optional

INTELLIGENT MAINTENANCE

Remote configuration and upgrade
 Supports export power control

APPLICATION

Family Use



CERTIFICATIONS OBTAINED



FOR OTHER VERSIONS:
 Please consult ONESTO or local distributor.

| Model | OST 2KTL-S1 | OST 3KTL-S1 | OST 3K6TL-S1 |
|-----------------------------------|--|-------------|--------------|
| Efficiency | | | |
| Max. Efficiency | 97.5% | 97.8% | 97.8% |
| European Efficiency | 96.5% | 96.8% | 96.8% |
| Input(PV) | | | |
| Max. Input Voltage | 500V | | |
| Max. PV configuration (STC) | 150% | | |
| Rated Input Voltage | 360V | | |
| Max. Input Current | 13A | | |
| Max.Short Circuit Current | 15A | | |
| Start Input Voltage | 70V | | |
| MPPT Operating Voltage Range | 50V-490V | | |
| Max. Number of PV Strings | 1 | | |
| No. of MPPTs | 1 | | |
| Output(Grid) | | | |
| Rated AC Active Power | 2,000W | 3,000W | 3,600W |
| Max. AC Apparent Power | 2,200VA | 3,300VA | 3,600VA |
| Max. AC Active Power (PF=1) | 2,200W | 3,300W | 3,600W |
| Max. AC Output Current | 10A | 15A | 16.0A |
| Rated AC Voltage | 220V/230V, L+N+PE | | |
| AC Voltage Range ^① | 160V-300V (Adjustable) | | |
| Rated Grid Frequency | 50Hz / 60Hz | | |
| Grid Frequency Range ^② | 45Hz-55Hz / 55Hz-65Hz (Adjustable) | | |
| THDI | <3% (Rated Power) | | |
| DC Current Injection | <0.5%In | | |
| Power Factor | >0.99 Rated power (Adjustable 0.8 Leading-0.8 Lagging) | | |
| Protection | | | |
| 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 (Optional) / AC Type III | | |
| Insulation detection | Support | | |
| Leakage current protection | Support | | |
| General | | | |
| Topology | Transformerless | | |
| IP Rating | IP65 | | |
| Night Self Consumption | <1W | | |
| Cooling | Natural cooling | | |
| Operating Temperature Range | -25°C-60°C | | |
| Relative Humidity Range | 0-100% | | |
| Max. Operating Altitude | 4000m | | |
| Noise (typical) | 30dB | | |
| Dimensions (W*H*D) | 320mm*344mm*137mm | | |
| Weight | 6.5kg | | |
| HMI & COM | | | |
| Display | Wireless & APP+LED, LCD (Optional) | | |
| Communication | WiFi (Optional) / GPRS (Optional) / RS485 (Optional) | | |
| Certification | | | |
| Safety | IEC62109-1, IEC62109-2 | | |
| Grid Code | IEC61727 / 62116, ABNT 16149 / 16150, IEEE 1547, AS 4777 | | |
| Warranty | 5 Years | | |

Remarks: ^{①②}The range of output voltage and frequency may vary depending upon different grid codes. Specifications are subject to change without advance notice.

OST 4/5/6KTL-D1

SINGLE PHASE & DUAL MPPT



SUPERIOR EFFICIENCY

Maximum efficiency 98.2%
String Current 13A, compatible with high Power modules
150% PV configuration, 110% output overload

HIGH RELIABILITY

IP65 waterproof and dustproof, C5 anti-corrosion
Compatible with wide power grid voltage and high harmonic power grid environment
DC /AC SPD optional, AFCI detection optional

INTELLIGENT MAINTENANCE

Remote configuration and upgrade
Supports export power control

APPLICATION

Family Use



CERTIFICATIONS OBTAINED



FOR OTHER VERSIONS:
Please consult ONESTO or local distributor.

| Model | OST 4KTL-D1 | OST 5KTL-D1 | OST 6KTL-D1 |
|-----------------------------------|--|-------------|-------------|
| Efficiency | | | |
| Max. Efficiency | 98.0% | 98.2% | 98.2% |
| European Efficiency | 97.0% | 97.3% | 97.4% |
| Input(PV) | | | |
| Max. Input Voltage | 550V | | |
| Max. PV configuration (STC) | 150% | | |
| Rated Input Voltage | 360V | | |
| Max. Input Current | 26A (2*13A) | | |
| Max.Short Circuit Current | 30A (2*15A) | | |
| Start Input Voltage | 90V | | |
| MPPT Operating Voltage Range | 70V-540V | | |
| Max. Number of PV Strings | 2(1/1) | | |
| No. of MPPTs | 2 | | |
| Output(Grid) | | | |
| Rated AC Active Power | 4,000W | 5,000W | 6,000W |
| Max. AC Apparent Power | 4,400VA | 5,500VA | 6,000VA |
| Max. AC Active Power (PF=1) | 4,400W | 5,500W | 6,000W |
| Max. AC Output Current | 20A | 25A | 27.3A |
| Rated AC Voltage | 220V/230V, L+N+PE | | |
| AC Voltage Range ^① | 160V-300V (Adjustable) | | |
| Rated Grid Frequency | 50Hz / 60Hz | | |
| Grid Frequency Range ^② | 45Hz-55Hz / 55Hz-65Hz (Adjustable) | | |
| THDI | <3% (Rated Power) | | |
| DC Current Injection | <0.5%In | | |
| Power Factor | >0.99 Rated power (Adjustable 0.8 Leading-0.8 Lagging) | | |
| Protection | | | |
| 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 (Optional) / AC Type III | | |
| Insulation detection | Support | | |
| Leakage current protection | Support | | |
| General | | | |
| Topology | Transformerless | | |
| IP Rating | IP65 | | |
| Night Self Consumption | <1W | | |
| Cooling | Natural cooling | | |
| Operating Temperature Range | -25°C-60°C | | |
| Relative Humidity Range | 0-100% | | |
| Max. Operating Altitude | 4000m | | |
| Noise (typical) | 30dB | | |
| Dimensions (W*H*D) | 347mm*350mm*137mm | | |
| Weight | 8.5kg | | |
| HMI & COM | | | |
| Display | Wireless & APP+LED, LCD (Optional) | | |
| Communication | WiFi (Optional) / GPRS (Optional) / RS485 (Optional) | | |
| Certification | | | |
| Safety | IEC62109-1, IEC62109-2 | | |
| Grid Code | IEC61727 / 62116, ABNT 16149 / 16150, IEEE 1547, AS 4777 | | |
| Warranty | 5 Years | | |

Remarks: ^{①②}The range of output voltage and frequency may vary depending upon different grid codes. Specifications are subject to change without advance notice.

OST 7/8/10KTL-D1

SINGLE PHASE & DUAL MPPT



SUPERIOR EFFICIENCY

Maximum efficiency 98.2%
String Current 13A, compatible with high Power modules
150% PV configuration, 110% output overload

HIGH RELIABILITY

IP65 waterproof and dustproof, C5 anti-corrosion
Compatible with wide power grid voltage and high harmonic power grid environment
DC /AC SPD optional, AFCI detection optional

INTELLIGENT MAINTENANCE

Remote configuration and upgrade
Supports export power control

APPLICATION

Family Use



CERTIFICATIONS OBTAINED



FOR OTHER VERSIONS:
Please consult ONESTO or local distributor.

| Model | OST 7KTL-D1 | OST 8KTL-D1 | OST 10KTL-D1 |
|-----------------------------------|--|-----------------|--------------|
| Efficiency | | | |
| Max. Efficiency | 98.2% | 98.2% | 98.2% |
| European Efficiency | 97.4% | 97.5% | 97.6% |
| Input(PV) | | | |
| Max. Input Voltage | 550V | | |
| Max. PV configuration (STC) | 150% | | |
| Rated Input Voltage | 360V | | |
| Max. Input Current | 26A (2*13A) | 39A (2*13A+13A) | |
| Max.Short Circuit Current | 30A (2*15A) | 45A(2*15A+15A) | |
| Start Input Voltage | 90V | | |
| MPPT Operating Voltage Range | 70V-540V | | |
| Max. Number of PV Strings | 2(1/1) | 3(2/1) | |
| No. of MPPTs | 2 | | |
| Output(Grid) | | | |
| Rated AC Active Power | 7,000W | 8,000W | 10,000W |
| Max. AC Apparent Power | 7,700VA | 8,800VA | 10,000VA |
| Max. AC Active Power (PF=1) | 7,700W | 8,800W | 10,000W |
| Max. AC Output Current | 35A | 40A | 45.5A |
| Rated AC Voltage | 220V/230V, L+N+PE | | |
| AC Voltage Range ^① | 160V-300V (Adjustable) | | |
| Rated Grid Frequency | 50Hz / 60Hz | | |
| Grid Frequency Range ^② | 45Hz-55Hz / 55Hz-65Hz (Adjustable) | | |
| THDI | <3% (Rated Power) | | |
| DC Current Injection | <0.5%In | | |
| Power Factor | >0.99 Rated power (Adjustable 0.8 Leading-0.8 Lagging) | | |
| Protection | | | |
| 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 (Optional) / AC Type III | | |
| Insulation detection | Support | | |
| Leakage current protection | Support | | |
| General | | | |
| Topology | Transformerless | | |
| IP Rating | IP65 | | |
| Night Self Consumption | <1W | | |
| Cooling | Natural cooling | | |
| Operating Temperature Range | -25°C-60°C | | |
| Relative Humidity Range | 0-100% | | |
| Max. Operating Altitude | 4000m | | |
| Noise (typical) | 30dB | | |
| Dimensions (W*H*D) | 400mm*450mm*170mm | | |
| Weight | 16kg | | |
| HMI & COM | | | |
| Display | Wireless & APP+LED, LCD (Optional) | | |
| Communication | WiFi (Optional) / GPRS (Optional) / RS485 (Optional) | | |
| Certification | | | |
| Safety | IEC62109-1, IEC62109-2 | | |
| Grid Code | IEC61727 / 62116, ABNT 16149 / 16150, IEEE 1547, AS 4777 | | |
| Warranty | 5 Years | | |

Remarks: ^{①②}The range of output voltage and frequency may vary depending upon different grid codes.
Specifications are subject to change without advance notice.

OST 6/8/10/12/15KTL

THREE PHASE & DUAL MPPT



SUPERIOR EFFICIENCY

Maximum efficiency 98.4%
String current 13A, compatible with high power modules
150% PV configuration, 110% output overload

HIGH RELIABILITY

Natural Cooling
Die-cast aluminum case
APP for local settings & display

INTELLIGENT MAINTENANCE

Easy installation, light weight and small size
Remote configuration and upgrade
Supports export control

APPLICATION

Family Use

CERTIFICATIONS OBTAINED



FOR OTHER VERSIONS:
Please consult ONESTO or local distributor.

| Model | OST 6KTL | OST 8KTL | OST 10KTL | OST 12KTL | OST 15KTL |
|-----------------------------------|--|----------|-----------------|-----------|-----------|
| Efficiency | | | | | |
| Max. Efficiency | 98.2% | 98.2% | 98.4% | 98.4% | 98.4% |
| European Efficiency | 97.8% | 97.8% | 98.0% | 98.0% | 98.0% |
| Input(PV) | | | | | |
| Max. Input Voltage | 1000V | | | | |
| Max. PV configuration (STC) | 150% | | | | |
| Rated Input Voltage | 620V | | | | |
| Max. Input Current | 26A (2*13A) | | 39A (2*13A+13A) | | |
| Max.Short Circuit Current | 30A (2*15A) | | 45A(2*15A+15A) | | |
| Start Input Voltage | 200V | | | | |
| MPPT Operating Voltage Range | 160V-950V | | | | |
| Max. Number of PV Strings | 2(1/1) | | 3(2/1) | | |
| No. of MPPTs | 2 | | | | |
| Output(Grid) | | | | | |
| Rated AC Active Power | 6,000W | 8,000W | 10,000W | 12,000W | 15,000W |
| Max. AC Apparent Power | 6,600VA | 8,800VA | 11,000VA | 13,200VA | 16,500VA |
| Max. AC Active Power (PF=1) | 6,600W | 8,800W | 11,000W | 13,200W | 16,500W |
| Max. AC Output Current | 3*10A | 3*13A | 3*16A | 3*18.2A | 3*22.7A |
| Rated AC Voltage | 380V/400V, 3W+N+PE | | | | |
| AC Voltage Range ^① | 277V-520V (adjustable) | | | | |
| Rated Grid Frequency | 50Hz / 60Hz | | | | |
| Grid Frequency Range ^② | 45Hz-55Hz / 55Hz-65Hz (Adjustable) | | | | |
| THDI | <3% (Rated Power) | | | | |
| DC Current Injection | <0.5%In | | | | |
| Power Factor | >0.99 Rated power (Adjustable 0.8 Leading-0.8 Lagging) | | | | |
| Protection | | | | | |
| DC switch | Support | | | | |
| Anti-islanding protection | Support | | | | |
| AC overcurrent protection | Support | | | | |
| AC short circuit protection | Support | | | | |
| DC reverse connection | Support | | | | |
| Surge Arrester | AC Type III | | | | |
| Insulation detection | Support | | | | |
| Leakage current protection | Support | | | | |
| General | | | | | |
| Topology | Transformerless | | | | |
| IP Rating | IP65 | | | | |
| Night Self Consumption | <1W | | | | |
| Cooling | Natural cooling | | | | |
| Operating Temperature Range | -25°C-60°C | | | | |
| Relative Humidity Range | 0-100% | | | | |
| Max. Operating Altitude | 4000m | | | | |
| Noise | <30dB | | | | |
| Dimensions (W*H*D) | 400mm*500mm*190mm | | | | |
| Weight | 18.9kg | | 21.8kg | | |
| HMI & COM | | | | | |
| Display | Wireless & APP+LED, LCD (Optional) | | | | |
| Communication | RS485, WiFi / GPRS / 4G / LAN (Optional) | | | | |
| Certification | | | | | |
| Safety | IEC62109-1, IEC62109-2 | | | | |
| Grid Code | IEC61727/62116 | | | | |
| Warranty | 5 Years | | | | |

Remarks: ^{①②}The range of output voltage and frequency may vary depending upon dierent grid codes. Specifications are subject to change without advance notice.

OST 17/20/22KTL

THREE PHASE & DUAL MPPT



SUPERIOR EFFICIENCY

Maximum efficiency 98.6%
 String current 13A, compatible with high power modules
 150% PV configuration, 110% output overload

HIGH RELIABILITY

Natural Cooling
 Integarted type II DC/AC SPD
 APP for local settings & display

INTELLIGENT MAINTENANCE

Remote configuration and upgrade
 Supports export control

APPLICATION

Small-sized Industrial and Residential Use

CERTIFICATIONS OBTAINED



FOR OTHER VERSIONS:
 Please consult ONESTO or local distributor.

| Model | OST 17KTL | OST 20KTL | OST 22KTL |
|-----------------------------------|--|-----------|-----------|
| Efficiency | | | |
| Max. Efficiency | 98.6% | 98.6% | 98.6% |
| European Efficiency | 98.2% | 97.7% | 98.2% |
| Input(PV) | | | |
| Max. Input Voltage | 1000V | | |
| Max. PV configuration (STC) | 150% | | |
| Rated Input Voltage | 620V | | |
| Max. Input Current | 54A(2*27A) | | |
| Max.Short Circuit Current | 60A(2*30A) | | |
| Start Input Voltage | 250V | | |
| MPPT Operating Voltage Range | 180V-960V | | |
| Max. Number of PV Strings | 4(2/2) | | |
| No. of MPPTs | 2 | | |
| Output(Grid) | | | |
| Rated AC Active Power | 17,000W | 20,000W | 22,000W |
| Max. AC Apparent Power | 18,700VA | 22,000VA | 24,200VA |
| Max. AC Active Power (PF=1) | 18,700VA | 22,000W | 24,200W |
| Max. AC Output Current | 3*28.3A | 3*33.5A | 3*35A |
| Rated AC Voltage | 380V/400V, 3W+N+PE | | |
| AC Voltage Range ^① | 277V-520V (Adjustable) | | |
| Rated Grid Frequency | 50Hz / 60Hz | | |
| Grid Frequency Range ^② | 45Hz-55Hz / 55Hz-65Hz (Adjustable) | | |
| THDI | <3% (Rated Power) | | |
| DC Current Injection | <0.5%In | | |
| Power Factor | >0.99 Rated power (Adjustable 0.8 LG - 0.8 LD) | | |
| Protection | | | |
| 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 | | |
| General | | | |
| Topology | Transformerless | | |
| IP Rating | IP65 | | |
| Night Self Consumption | <1W | | |
| Cooling | Natural cooling | | |
| Operating Temperature Range | -25°C-60°C | | |
| Relative Humidity Range | 0-100% | | |
| Max. Operating Altitude | 4000m | | |
| Noise | <30dB | | |
| Dimensions (W*H*D) | 555mm*446mm*270mm | | |
| Weight | 35kg | | |
| HMI & COM | | | |
| Display | Wireless & APP+LED, LCD (Optional) | | |
| Communication | RS485, WiFi / GPRS / 4G / LAN (Optional) | | |
| Certification | | | |
| Safety | IEC62109-1, IEC62109-2 | | |
| Grid Code | IEC61727/62116 | | |
| Warranty | 5 Years | | |

Remarks: ^{①②}The range of output voltage and frequency may vary depending upon dierent grid codes.
 Specifications are subject to change without advance notice.

OST 25/28/30KTL

THREE PHASE & DUAL MPPT



SUPERIOR EFFICIENCY

Maximum efficiency 98.6%
String current 13A, compatible with high power modules
150% PV configuration, 110% output overload

HIGH RELIABILITY

Integarted type II DC/AC SPD
APP for local settings & display

INTELLIGENT MAINTENANCE

Remote configuration and upgrade
Supports export control

APPLICATION

Small-sized Industrial and Residential Use

**CERTIFICATIONS
OBTAINED**



FOR OTHER VERSIONS:
Please consult ONESTO or local distributor.

| Model | OST 25KTL | OST 28KTL | OST 30KTL |
|-----------------------------------|--|-----------|-----------|
| Efficiency | | | |
| Max. Efficiency | 98.6% | 98.6% | 98.6% |
| European Efficiency | 98.3% | 98.3% | 98.3% |
| Input(PV) | | | |
| Max. Input Voltage | 1000V | | |
| Max. PV configuration (STC) | 150% | | |
| Rated Input Voltage | 620V | | |
| Max. Input Current | 81A(2*40.5A) | | |
| Max.Short Circuit Current | 90A(2*45A) | | |
| Start Input Voltage | 250V | | |
| MPPT Operating Voltage Range | 180V-960V | | |
| Max. Number of PV Strings | 6(3/3) | | |
| No. of MPPTs | 2 | | |
| Output(Grid) | | | |
| Rated AC Active Power | 25,000W | 28,000W | 30,000W |
| Max. AC Apparent Power | 27,500VA | 30,800VA | 33,000VA |
| Max. AC Active Power (PF=1) | 27,500VA | 30,800W | 33,000W |
| Max. AC Output Current | 3*40A | 3*45A | 3*48A |
| Rated AC Voltage | 380V/400V, 3W+N+PE | | |
| AC Voltage Range ^① | 277V-520V (Adjustable) | | |
| Rated Grid Frequency | 50Hz / 60Hz | | |
| Grid Frequency Range ^② | 45Hz-55Hz / 55Hz-65Hz (Adjustable) | | |
| THDI | <3% (Rated Power) | | |
| DC Current Injection | <0.5%In | | |
| Power Factor | >0.99 Rated power (Adjustable 0.8 LG - 0.8 LD) | | |
| Protection | | | |
| 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 | | |
| General | | | |
| Topology | Transformerless | | |
| IP Rating | IP65 | | |
| Night Self Consumption | <1W | | |
| Cooling | Fan cooling | | |
| Operating Temperature Range | -25°C-60°C | | |
| Relative Humidity Range | 0-100% | | |
| Max. Operating Altitude | 4000m | | |
| Noise | <50dB | | |
| Dimensions (W*H*D) | 555mm*446mm*270mm | | |
| Weight | 41kg | | |
| HMI & COM | | | |
| Display | Wireless & APP+LED, LCD (Optional) | | |
| Communication | RS485, WiFi / GPRS / 4G / LAN (Optional) | | |
| Certification | | | |
| Safety | IEC62109-1, IEC62109-2 | | |
| EMC | EN 61000-6-2/4 | | |
| Grid Code | IEC61727/62116 | | |
| Warranty | 5 Years | | |

Remarks: ^{①②}The range of output voltage and frequency may vary depending upon dierent grid codes.
Specifications are subject to change without advance notice.

OST 50/60KTL

THREE PHASE & QUAD MPPT



SUPERIOR EFFICIENCY

Maximum efficiency 99.0%
 String current 13A, compatible with high power modules
 150% PV configuration, 110% output overload

HIGH RELIABILITY

Integrated type II DC/AC SPD
 APP for local settings & display
 High quality components use

INTELLIGENT MAINTENANCE

String level I/V detect(Optional)
 Remote configuration and upgrade
 Supports export control

APPLICATION

Large-scale Industrial and Commercial Sites



CERTIFICATIONS OBTAINED



FOR OTHER VERSIONS:
 Please consult ONESTO or local distributor.

| Model | OST 50KTL | OST 60KTL |
|------------------------------|---|------------------------|
| Efficiency | | |
| Max. Efficiency | 99.0% | 99.0% |
| European Efficiency | 98.5% | 98.5% |
| Input(PV) | | |
| Max. Input Voltage | 1100V | |
| Max. PV configuration (STC) | 150% | |
| Rated Input Voltage | 620V | |
| Max. Input Current | 130A (39A/39A/26A/26A) | 156A (39A/39A/39A/39A) |
| Max. Short Circuit Current | 150A(45A/45A/30A/30A) | 180A(45A/45A/45A/45A) |
| Start Input Voltage | 250V | |
| MPPT Operating Voltage Range | 200V-1000V | |
| Max. Number of PV Strings | 10(3/3/2/2) | 12(3/3/3/3) |
| No. of MPPTs | 4 | |
| Output(Grid) | | |
| Rated AC Active Power | 50,000W | 60,000W |
| Max. AC Apparent Power | 55,000VA | 66,000VA |
| Max. AC Active Power (PF=1) | 55,000W | 66,000W |
| Max. AC Output Current | 3*76A | 3*92A |
| Rated AC Voltage | 380V/400V, 3W+N+PE | |
| AC Voltage Range① | 277V-520V (Adjustable) | |
| Rated Grid Frequency | 50Hz / 60Hz | |
| Grid Frequency Range② | 45Hz-55Hz / 55Hz-65Hz (Adjustable) | |
| THDI | <3% (Rated Power) | |
| DC Current Injection | <0.5%In | |
| Power Factor | >0.99 Rated power (Adjustable 0.8 Leading - 0.8Lagging) | |
| Protection | | |
| 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 | |
| General | | |
| Topology | Transformerless | |
| IP Rating | IP65 | |
| Night Self Consumption | <1W | |
| Cooling | Fan cooling | |
| Operating Temperature Range | -25°C-60°C | |
| Relative Humidity Range | 0-100% | |
| Max. Operating Altitude | 4000m | |
| Noise | <62dB | |
| Dimensions (W*H*D) | 855mm*555mm*275mm | |
| Weight | 73kg | 74Kg |
| HMI & COM | | |
| Display | Wireless & APP+LED, LCD (Optional) | |
| Communication | RS485, WiFi / GPRS / 4G / LAN (Optional) | |
| Certification | | |
| Safety | IEC62109-1, IEC62109-2 | |
| Grid Code | IEC61727/62116, AS 4777 | |
| Warranty | 5 Years | |

Remarks: ①②The range of output voltage and frequency may vary depending upon different grid codes. Specifications are subject to change without advance notice.

EBW-576



SAFE AND RELIABLE

IP65 waterproof
EbW-576 safety battery

LARGE CAPACITY

Single pack capacity 5.76kWh

EASY INSTALLATION

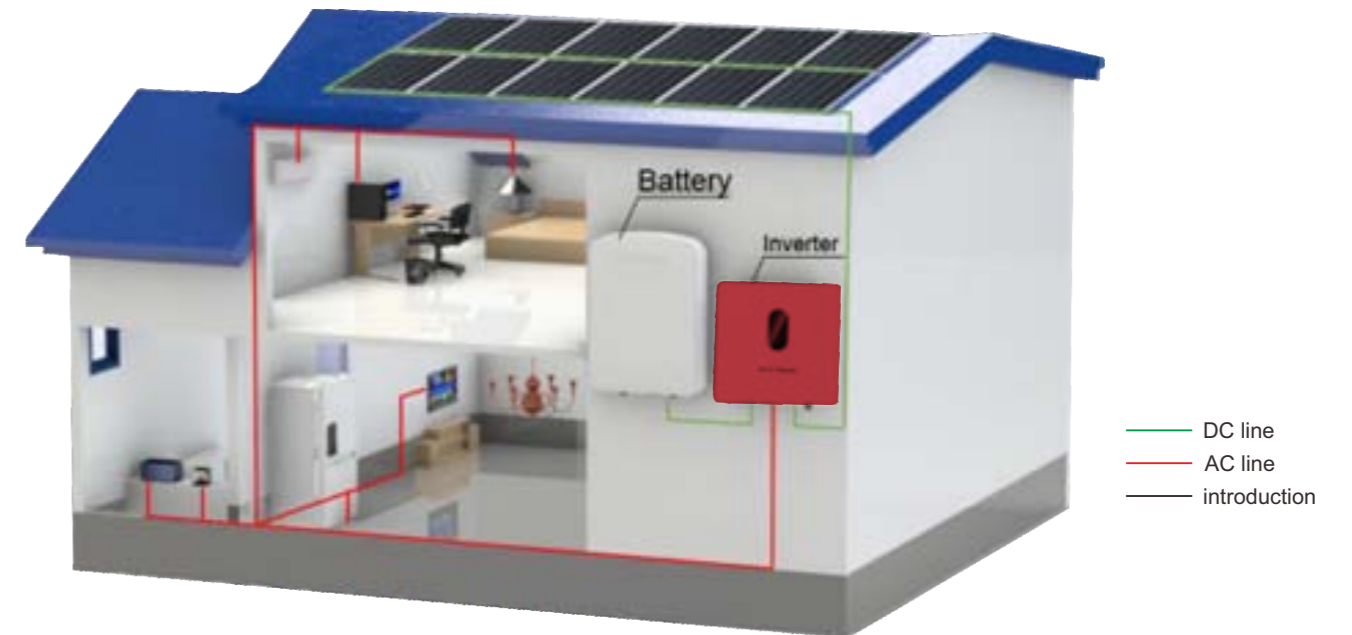
Free collocation capacity for multiple combinations

SUPPORT MULTIPLE BATTERIES IN PARALLEL

Free collocation capacity for multiple combinations

TECHNICAL DATA

| Model | EBW-576 |
|-------------------------------------|--|
| Output | |
| Capacity | 5.76kWh |
| Depth of Discharge | 90% DOD |
| Nominal Voltage | 48Vdc |
| Voltage Range | 39-54Vdc |
| Max. Charging Voltage | 54V dc |
| Continuous Current at 25°C | 100A |
| Continuous Current at 35°C | <80A |
| Continuous Current at 45°C | <50A |
| Max. Pulse Current at 25°C, 10s | <115A |
| Continuous Charging Current at 45°C | 50A |
| Efficiency | |
| Efficiency | >97% |
| General | |
| Operating Condition | Indoor or Outdoor |
| Operating Temperature | -10°C - 45°C |
| Dimension (L*W*H) | 897*650*158mm |
| Weight | 78Kg |
| Cooling Type | Natural Cooling |
| Shell Material | Aluminum |
| Installation Method | Wall Mounted |
| IP Rating | IP65 |
| Max. Parallel | 8 |
| Parallel Setting | Auto Sensing |
| Life Span | >10 Years |
| Communication Mode | RS485, CAN |
| Protection Mode | Triple Hardware Protection |
| Protection | |
| Battery Protection | Over-current , Over-voltage , Short circuit , Under-voltage , Over-temperature |
| Certification | |
| Safety | UI1973, IEC62619, UN38.3 |



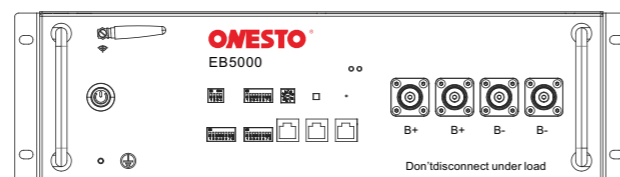
FOR OTHER VERSIONS:
Please consult ONESTO or local distributor.

EB5000



FEATURES

- Assembly freely in series or parallel Up to 8S8P (409.6V326.4kWh)
- High energy efficiency Energy efficiency (charge and discharge) > 97%
- High Rate Charge & Discharge Max charge current 60A,Max discharge current 80A
- More Safety Dual hardware & Triple software protection
- Safe and Reliable BMS Relay design instead of mosfet
- Long Life Reliable LFP cells,Cycle life >6000 cycles
- High Reliability Key devices (Relay,Fuse) approved by UL and IEC
- More Smart With digital monitor system App with WIFI
- Smart Design & Easy installation Plug in & off
- More Quiet Without fan,more quiet and reduce the risk of fan failure



TECHNICAL DATA

| Model | EB5000 |
|-----------------------------------|--|
| Total Energy* | 5.1kWh |
| Usable Energy(DC)* | 4.8kWh |
| Nominal Dis-/Charge Power | 3.0kW |
| Peak Power(Only Discharge) | 6kW for 3s |
| Constant Current(Only Discharge) | 80A |
| Voltage | 48~56Vd.c |
| Nominal Voltage | 51.2Vd.c |
| Nominal Current | 60A |
| Max. Charge Voltage | 57.6Vd.c |
| Weight | 45kg |
| Dimension(mm) | 500*448*135mm |
| Max.recommended DOD | 90% |
| Operating Condition | Indoor |
| Operating Temperature | Charge From 0~50°C Discharge From -10~55°C |
| WIFI Frequency Range | 2400MHz~2483MHz |
| Humidity | < 60%(No condensed water) |
| Over Voltage Category | II |
| Cooling Type | Natural cooling |
| Case Material | Metal |
| Color | Black or White |
| Installation | WII mounting/Ground Installation |
| IP rating | IP 20 |
| Protective Class | I |
| Max. Connection Number | 8S/4P |
| Warranty | 10 years |
| Life Span | >15 years |
| Communication | CAN/ RS485 |
| Protection Mode | Dual hardware protection |
| Battery Protection | Over-current / Over-voltage / Short circuit / Under-voltage / Over temperature |
| Safety | Cell UL 1973 CE / IEC62619 |
| Hazardous Material Classification | 9 |
| Transportation | UN 38.3 |

Testing conditions based on temperature 25 at the beginning of life.



FOR OTHER VERSIONS:
Please consult ONESTO or local distributor.

ES Series



ES5000
5kWh/LV

ES5800
5.8kWh/LV



ES7500
7.5kWh/LV

ES10K
10kWh/LV

ENERGY STORAGE

- Digital monitoring system APP
- High inverter compatibility
- Reliable LFP cells
- CANbus standard connection
- Natural cooling system
- Scalable up to 20-40kWh (4 Parallel)
- 10 Years limited warranty
- IP65

TECHNICAL PROPERTIES

| Model | ES5000 5kWh/LV | ES5800 5.8kWh/LV | ES7500 7.5kWh/LV | ES10K 10kWh/LV |
|-----------------------------------|---|---------------------|---------------------|-------------------|
| Total Energy(DC)* | 5.1kWh | 5.8kWh | 7.5kWh | 10kWh |
| Usable Energy(DC)* | 4.6kWh | 5.3kWh | 6.9kWh | 9.2kWh |
| Nominal Dis-/Charge Power | 3.0kW | 2.75kW | 3.75kW | 4.6kW |
| Peak Power(Only Discharge) | 6kW for 3s | 7kW for 3s | 8kW for 3s | 10kW for 3s |
| Constant Current(Only Discharge) | 80A | 100A | 110A | 120A |
| Voltage | 48~56Vd.c | 42~54Vd.c | 48~56Vd.c | 48~56Vd.c |
| Nominal Voltage | 51.2Vd.c | 48Vd.c | 51.2Vd.c | 51.2Vd.c |
| Nominal Current | 60A | 57A | 75A | 90A |
| Max. Charge Voltage | 57.6Vd.c | 54.0Vd.c | 57.6Vd.c | 57.6Vd.c |
| Weight | 55kg | 66kg | 82kg | 96kg |
| Dimension(mm) | 525*537*238mm | 525*635*238mm | 525*825*238mm | 525*825*238mm |
| Max.recommended DOD | 90% | | | |
| Operating Condition | Indoor or outdoor | | | |
| Operating Temperature | Charge | From 0~45°C | | |
| | Discharge | From -10~50°C | | |
| WiFi Frequency Range | 2400MHz~2483MHz | | | |
| Humidity | 4~100%(No condensed water) | | | |
| Pollution Degree | 3 | | | |
| Over Voltage Category | II | | | |
| Cooling Type | Natural cooling | | | |
| Case Material | Metal + Plastic | | | |
| Color | Black+Silver grey or White | | | |
| Installation | Free standing | | | |
| IP rating | IP 65 | | | |
| Protective Class | I | | | |
| Max. Number of Parallel or Series | 4 | | | |
| Warranty | 10 years | | | |
| Life Span | >15 years | | | |
| Communication | CAN/ RS485 | | | |
| Protection Mode | Triple hardware protection | | | |
| Battery Protection | Over-current/Over-voltage/Short circuit/ Under-voltage/Over temperature | | | |
| Safety | Cell UL 1973 | Cell UL 1973 | Cell UL 1973 | Cell UL 1973 |
| | CE | Pack TUV/CE | CE | CE |
| Hazardous Material Classification | 9 | | | |
| Transportation | UN 38.3 | | | |

Testing conditions based on temperature 25°C at the beginning of life.

*Total Energy/Usable Energy measured under specific conditions from ONESTO .



FOR OTHER VERSIONS:
Please consult ONESTO or local distributor.