

PowerX Stack

- Inverters can be freely paralleled and stacked
- Compatible with Virtual Power Plant (VPP) Technology
- Support deep customization
- IP66 natural cooling
- Default configuration includes active balancing
- Built-in safety features
- A single-layer battery contains 9 series-connected 320Ah cells
- Built-in battery optimizer ensures worry-free mixing of new and old batteries
- High energy density design enables efficient energy storage in a more compact form
- All-in-one units can be horizontally paralleled



Inverter Technical Data

| Model | KE-5KD5L1EN | KE-6KD5L1EN | KE-7KD5L1EN | KE-7K5D5L1EN | KE-8KD5L1EN | KE-10KD5L1EN | KE-12KD5L1EN |
|---|---|-------------|-------------|--------------|-------------|--------------|--------------|
| Parallel Mode | | | | | | | |
| No. of Parallel Machines Allowed (Unit) | 10 | | | | | | |
| AC Input/Output Data | | | | | | | |
| Rated AC Input/Output Active Power (W) | 5000 | 6000 | 7000 | 7500 | 8000 | 10000 | 12000 |
| Rated AC Input Apparent Power (VA) | 5500 | 6600 | 7700 | 8250 | 8800 | 11000 | 13200 |
| Rated AC Input/Output Current (A) | 20.8 | 25.0 | 29.2 | 31.25 | 33.3 | 41.7 | 50 |
| Max. AC Input/Output Current (A) | 22.9 | 27.5 | 32.1 | 34.4 | 36.7 | 45.8 | 55 |
| Max. Continuous AC Passthrough (grid to load) (A) | 50 | | | 63 | | | |
| Peak Power (off-grid) (A) | 2 Times Of Rated Power, 10s | | | | | | |
| Power Factor Adjustment Range | 0.9-1 | | | | | | |
| Rated Input/Output Voltage/Range (V) | 220/230 0.88Un<U<1.1Un | | | | | | |
| Rated Input/Output Grid Frequency/Range(Hz) | 50/45-55, 60/55-65 | | | | | | |
| Grid Connection Form | L+N+PE | | | | | | |
| Total Current Harmonic Distortion THDi | <3%(Rated power) | | | | | | |
| DC Current Output | <0.5% X Rated current | | | | | | |
| Conversion Time (Bypass and inverter) | 10ms | | | | | | |
| Battery Input Data | | | | | | | |
| Battery Type | Lead-acid /Lithium Iron Phosphate Battery /Sodium-ion Battery(optional) | | | | | | |
| Max.Charging Current(A) | 135 | | 190 | | | 200 | |
| Max.Discharging Current(A) | 135 | | 190 | | | 200 | |
| Battery Voltage Range(V) | 40-60/27-66(Sodium-ion mode) | | | | | | |
| Charging Strategy for Li-ion Battery | BMS adaptivity | | | | | | |
| Number of Battery Input | 1 | | | | | | |
| PV String Input Data | | | | | | | |
| No. of Circuits | 2/1+1 | | | 2/2+2 | | | |
| Max. PV Open-circuit Voltage (V) | 550 | | | | | | |
| Start-up Voltage (V) | 100 | | | | | | |
| Rated PV Voltage (V) | 370 | | | | | | |
| MPPT Voltage Range (V) | 125-425 | | | | | | |
| Max. PV Input Power (W) | 7500 | 9000 | 10500 | 11250 | 12000 | 15000 | 18000 |
| Max. Operating PV Input Current (A) | 17+17 | | | 26+26 | | | |
| Max. Input Short-Circuit Current (A) | 28+28 | | | 44+44 | | | |
| Efficiency | | | | | | | |
| Max. Efficiency | 97.6% | | | | | | |
| Euro Efficiency | 96.5% | | | | | | |
| MPPT Efficiency | >99% | | | | | | |
| Equipment Protection | | | | | | | |
| Integrated | DC polarity reverse connection protection, AC output overload protection, thermal protection, AC output overvoltage protection, AC output short circuit protection, DC component monitoring, overvoltage load drop protection, ground current monitoring, arc fault circuit interruption (optional), grid monitoring, islanding monitoring, ground fault monitoring, DC input switch, DC terminal impedance monitoring, residual current monitoring (RCD), surge protection | | | | | | |
| General Data | | | | | | | |
| Ingress Protection (IP) Rating | IP66 | | | | | | |
| Operating Temperature Range(°C) | -40~+ 60 , >45°C Derating | | | | | | |
| Permissible Ambient Humidity | 0-100% | | | | | | |
| Noise Level @ 1m | <30dB @ 25°C (77°F) | | | | | | |
| Type of Cooling | Intelligent Air Cooling | | | | | | |
| Communication Port | RS485/RS232/CAN/Wi-Fi/Bluetooth/4G | | | | | | |
| Dimensions(HxWxD) | 638×363×230mm (Excluding Connectors and Brackets) | | | | | | |
| Weight | 30kg | | | | | | |
| Permissible Altitude | 2000m | | | | | | |
| Warranty | 5 Years /10 Years | | | | | | |
| Over Voltage Category | TYPE II(DC), TYPE II(AC) | | | | | | |
| Certification | | | | | | | |
| Overview | CE-LVD EN IEC 62109-1/-2,CE-EMC EN IEC 61000-6-1/-3 ,RoHS ,VOC IEC 62920 , EN 50549 | | | | | | |



PowerX Stack

- Inverters can be freely paralleled and stacked
- Compatible with Virtual Power Plant (VPP) Technology
- Support deep customization
- IP66 natural cooling
- Default configuration includes active balancing
- Built-in safety features
- A single-layer battery contains 9 series-connected 320Ah cells
- Built-in battery optimizer ensures worry-free mixing of new and old batteries
- High energy density design enables efficient energy storage in a more compact form
- All-in-one units can be horizontally paralleled



Battery Technical Data

| Model | NP-SL6P2 | NP-SL9P2 |
|--|---|--|
| Cell Type | LiFePO ₄ | |
| Cell Capacity | 320Ah | |
| Number Of Cell Cycles | 6000 cycles | |
| Total Battery Capacity | 6.15kWh | 9.21kWh |
| Usable Battery Capacity | 5.84kWh | 8.76kWh |
| Depth Of Discharge | 90%-95% | |
| Max Charge And Discharge Power | Charging Power: 1920w; Discharging Power: 3744w | Charging Power: 2880w; Discharging Power: 5616w |
| Peak Charge And Discharge Power (10 Seconds) | 4032W | 6048W |
| Other Parameter | | |
| Weight | 55kg | 70kg |
| Dimensions (HxWxD) | 467.5x864x342mm | |
| Storage Temperature | -25 ~ 60°C | |
| Operating Temperature | -20 ~ 55°C | |
| Operating Relative Humidity | 5% ~ 95% | |
| Max Operating Altitude | 4000m | |
| Type of Cooling | Natural convection | |
| Ingress Protection (IP) Rating | IP66 | |
| Installation | Floor-mounted Installation, Wall-mounted Installation | |
| Number Of Battery Modules | 1 ~ 6 Units | |
| Communication Port | CAN / RS485 | |

Web: www.ktechsolar.com
Email: info@ktechsolar.com



PowerX Stack

- Inverters can be freely paralleled and stacked
- Compatible with Virtual Power Plant (VPP) Technology
- Support deep customization
- IP66 natural cooling
- Default configuration includes active balancing
- Built-in safety features
- A single-layer battery contains 9 series-connected 320Ah cells
- Built-in battery optimizer ensures worry-free mixing of new and old batteries
- High energy density design enables efficient energy storage in a more compact form
- All-in-one units can be horizontally paralleled



Inverter Technical Data

| Model | KE-15KD5H3EN | KE-20KD5H3EN | KE-25KD5H3EN | KE-29K9D5H3EN | KE-30KD5H3EN |
|--|--------------------------------|--------------|--------------|---------------|--------------|
| PV Input Data | | | | | |
| Max.Connected Photovoltaic Power (W) | 30000 | 40000 | 50000 | 59800 | 60000 |
| Max. PV Input Voltage(V) | 1000 | | | | |
| Start-up Voltage(V) | 180 | | | | |
| MPPT Voltage Range(V) | 150-850 | | | | |
| Rated PV Input Voltage(V) | 600 | | | | |
| Max.Operating PV Input Current(A) | 40 | | | | |
| Max.Input Short-Circuit Current(A) | 65 | | | | |
| No.of MPP Trackers | 3 | | | | |
| No.of Strings MPP Tracker | 2/2/2 | | | | |
| Battery Input Data | | | | | |
| Battery Type | Lithium Iron Phosphate Battery | | | | |
| Rated Battery Voltage (V) | 150~800 | | | | |
| Max.Charge/Discharge Current (A) | 70*2 | | | | |
| AC Output Data | | | | | |
| Rated AC Output Active Power (W) | 15000 | 20000 | 25000 | 29900 | 30000 |
| Max.AC Output Apparent Power(VA) | 16500 | 22000 | 27500 | 32890 | 33000 |
| Rated AC Output Current(A) | 22.7 | 30.3 | 37.88 | 45.3 | 45.5 |
| Max.AC Output Current(A) | 25 | 33.3 | 41.7 | 49.8 | 50 |
| Rated Output Voltage(V) | 220/380; 230/400; 3L/N/PE | | | | |
| Rated Input/Output Grid Frequency/Range(Hz) | 50/60,+/-5 | | | | |
| Power Factor Adjustment Range | 1(-0.8~0.8) | | | | |
| AC Input Data | | | | | |
| Rated AC Input Current(A) | 45.5 | 60.6 | 75.8 | 90.6 | 90.9 |
| Rated Input Voltage(V) | 220/380; 230/400; 3L/N/PE | | | | |
| Off-grid Output Parameters | | | | | |
| Rated Output Power (W) | 15000 | 20000 | 25000 | 29900 | 30000 |
| Max.Output Power(W) | 1.6 Times Of Rated Power, 10s | | | | |
| Rated Output Current (A) | 22.7 | 30.3 | 41.7 | 45.3 | 45.5 |
| Rated Input/Output Grid Frequency/Range(Hz) | 50/60,+/-5 | | | | |
| Power Factor Adjustment Range | 1(-0.8~0.8) | | | | |
| Parallel Operation | Supported, up to 10 units | | | | |
| Switching time (ms) | <10 | | | | |
| Total Voltage Harmonic Distortion Rate (THDv) [%](Linear load) | <3%(Rated power) | | | | |
| Efficiency | | | | | |
| Max.Efficiency | 97.8% | | | | |
| Euro Efficiency | 97% | | | | |
| MPPT Efficiency | 99% | | | | |
| Max.Efficiency (Battery to AC) | 97.6% | | | | |
| Max.Efficiency (PV to Battery) | 98.1% | | | | |
| Dimensions(HxWxD) | 580x530x270mm | | | | |
| Equipment Protection | | | | | |
| DC/Battery Reverse Connection Protection | Integrated | | | | |
| Insulation Impedance Monitoring | Integrated | | | | |
| DC/AC Lightning Protection | Integrated | | | | |
| AC Overcurrent/Short-circuit Protection | Integrated | | | | |
| Ground Fault Monitoring | Integrated | | | | |
| Power Network Monitoring | Integrated | | | | |
| String Monitoring | Integrated | | | | |
| Island Protection Monitoring | Integrated | | | | |
| DC/AC Overvoltage | OVCI(DC),OVCI(AC) | | | | |
| AFCI(Arc Fault Circuit Interrupter) | Optional | | | | |
| Ingress Protection (IP) Rating | IP66 | | | | |



PowerX Stack

- Inverters can be freely paralleled and stacked
- Compatible with Virtual Power Plant (VPP) Technology
- Support deep customization
- IP66 natural cooling
- Default configuration includes active balancing
- Built-in safety features
- A single-layer battery contains 9 series-connected 320Ah cells
- Built-in battery optimizer ensures worry-free mixing of new and old batteries
- High energy density design enables efficient energy storage in a more compact form
- All-in-one units can be horizontally paralleled



Battery Technical Data

| Model | NP-SL6P2 | NP-SL9P2 |
|--|---|--|
| Cell Type | LiFePO ₄ | |
| Cell Capacity | 320Ah | |
| Number Of Cell Cycles | 6000 cycles | |
| Total Battery Capacity | 6.15kWh | 9.21kWh |
| Usable Battery Capacity | 5.84kWh | 8.76kWh |
| Depth Of Discharge | 90%-95% | |
| Max Charge And Discharge Power | Charging Power: 1920w; Discharging Power: 3744w | Charging Power: 2880w; Discharging Power: 5616w |
| Peak Charge And Discharge Power (10 Seconds) | 4032W | 6048W |
| Other Parameter | | |
| Weight | 55kg | 70kg |
| Dimensions (HxWxD) | 467.5x864x342mm | |
| Storage Temperature | -25 ~ 60°C | |
| Operating Temperature | -20 ~ 55°C | |
| Operating Relative Humidity | 5% ~ 95% | |
| Max Operating Altitude | 4000m | |
| Type of Cooling | Natural convection | |
| Ingress Protection (IP) Rating | IP66 | |
| Installation | Floor-mounted Installation, Wall-mounted Installation | |
| Number Of Battery Modules | 1 ~ 6 Units | |
| Communication Port | CAN / RS485 | |

Web: www.ktechsolar.com
Email: info@ktechsolar.com

