

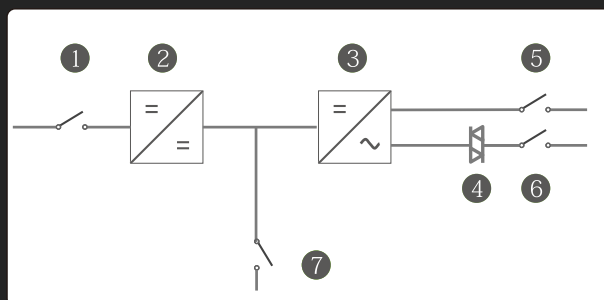
ATESS HPS 30/50/100/120/150



LEADING - EDGE TECHNOLOGY

- ▶ **All in one hybrid inverter**
battery, load, grid, solar connection all supported
- ▶ **Programmable working mode**
peak-shaving, back-up, use the system however you want it
- ▶ **Scalable design**
Doubled capacity by paralleling 2 units
- ▶ **Touchscreen LCD**
More convenient for parameter setting and maintenance
- ▶ **Seamless transfer**
Uninterruptable power supply guaranteed
- ▶ **Dry contact output**
Supports remote control of DG

Block Diagram



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|---------------------------|--------------------|
| 1. PV breaker | 2. PV controller |
| 3. Bidirectional Inverter | 4. Transfer switch |
| 5. Load breaker | 6. Grid breaker |
| 7. Battery breaker | |

Datasheet	ATESS HPS 30	ATESS HPS 50	ATESS HPS 100	ATESS HPS 120	ATESS HPS 150
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AC(Grid-connected)

Apparent power	33kVA	55kVA	110kVA	132kVA	165kVA
Rated power	30kW	50kW	100kW	120kW	150kW
Rated voltage	400V	400V	400V	400V	400V
Rated current	43A	72A	144A	173A	217A
Voltage range	360V - 440V	360V - 440V	360V - 440V	360V - 440V	360V - 440V
Rated frequency	50/60Hz	50/60Hz	50/60Hz	50/60Hz	50/60Hz
Frequency range	45~55/55~65Hz	45~55/55~65Hz	45~55/55~65Hz	45~55/55~65Hz	45~55/55~65Hz
THDi	<3%	<3%	<3%	<3%	<3%
PF	0.8lagging~0.8leading	0.8lagging~0.8leading	0.8lagging~0.8leading	0.8lagging~0.8leading	0.8lagging~0.8leading
AC connection	3/N/PE	3/N/PE	3/N/PE	3/N/PE	3/N/PE

AC(Off-grid)

Apparent power	33kVA	55kVA	110kVA	132kVA	165kVA
Rated power	30kW	50kW	100kW	120kW	150kW
Rated voltage	400V	400V	400V	400V	400V
Rated current	43A	72A	144A	173A	217A
THDU	≤2%linear	≤2%linear	≤2%linear	≤2%linear	≤2%linear
Rated frequency	50/60Hz	50/60Hz	50/60Hz	50/60Hz	50/60Hz
Overload capability	110%-10 mins 120%-1 min	110%-10 mins 120%-1 min	110%-10 mins 120%-1 min	110%-10 mins 120%-1 min	110%-10 mins 120%-1 min

DC(battery and PV)

Max PV Open-circuit voltage	1000 VDC	1000 VDC	1000 VDC	1000 VDC	1000 VDC
Recommended PV power	30kWp	50kWp	100kWp	120kWp	150kWp
PV MPPT voltage range	480VDC-800VDC	480VDC-800VDC	480VDC-800VDC	480VDC-800VDC	480VDC-800VDC
Recommended nominal battery voltage	420V	420V	420V	420V	420V
Battery voltage range	352-600V*	352-600V*	352-600V*	352-600V*	352-600V*
Max. charge/discharge power	30kW	50kW	100kW	120kW	150kW
Max. charge/discharge current	85A	142A	285A	340A	425A

General Information

Protection degree	IP20	IP20	IP20	IP20	IP20
Noise emission	<65dB(A)@1m	<65dB(A)@1m	<65dB(A)@1m	<65dB(A)@1m	<65dB(A)@1m
Environment temperature	-25 °C... +55 °C	-25 °C... +55 °C	-25 °C... +55 °C	-25 °C... +55 °C	-25 °C... +55 °C
Cooling	Forced-air	Forced-air	Forced-air	Forced-air	Forced-air
Relative humidity	0 ~95% non-condensing	0 ~95% non-condensing	0 ~95% non-condensing	0 ~95% non-condensing	0 ~95% non-condensing
Maximum altitude	6000m (derate over 3000m)	6000m (derate over 3000m)	6000m (derate over 3000m)	6000m (derate over 3000m)	6000m (derate over 3000m)
Dimension (W/H/D)	950/1860/750mm	950/1860/750mm	1200/1900/800mm	1200/1900/800mm	1400/1900/800mm
Weight	440kg	620kg	900kg	1024kg	1250kg
Build-in transformer	yes	yes	yes	yes	yes
Transfer between on/off grid	Automatic≤10ms	Automatic≤10ms	Automatic≤10ms	Automatic≤10ms	Automatic≤10ms
Standby consumption	<30W	<30W	<30W	<30W	<30W

Communication

Display	Touch screen	Touch screen	Touch screen	Touch screen	Touch screen
Communication interface	RS485/CAN	RS485/CAN	RS485/CAN	RS485/CAN	RS485/CAN

* Battery voltage is determined by the following equation:

$$V_{min} = 352 \times V_n / V_1, V_{max} = (V_{mpp} - 100) \times V_n / V_2, V_{max} < 600VDC$$

V1 is battery cell discharge cut-off voltage, V2 is battery cell boost charge voltage, Vn is battery cell nominal voltage.