

Hybrid Inverter

Tailored for sodium-ion batteries, it blends cutting-edge safety features with sodium-ion's inherent safety to offer unparalleled security. Dual independent ports allow for easy battery expansion with-out altering existing setups, ensuring a flexible and scalable system.



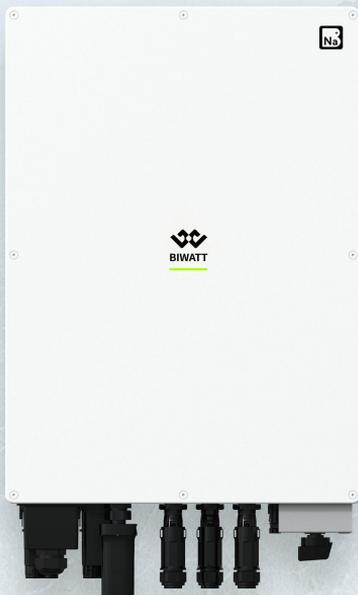
H1 Pro

Higher Reliability

- IP65 Outdoor & indoor use
- Natural cooling, ultra silence
- SiC technology, longer lifespan
- Plug-in design, easy to install

High Capability

- 6 units in parallel
- 2 independent ports for battery
- Support mixture use of old & new battery



H2

Smart Monitoring

- Auto sleep
- VPP interface ready
- Cloud + Smart data analysis

Strong Load Adaptability

- UPS function
- Flexible DO control
- 10ms on/off-grid switchover

* Some features are only available with specific inverters



Hybrid Inverter H1 Pro (PNH-6-03), Single Phase, On-Grid

Input (PV)	Max. input power	9,000 Wp
	Starting voltage	95V
	Max. input voltage	600V
	MPPT voltage range	80 V ~ 550 V
	Full load MPPT voltage range	350 V ~ 500 V
	Number of MPPTs	2
	Max. input string per MPPT	1 / 1
	Nominal input voltage	360 V
	Max. input current	18 A / 18 A
On-Grid Parameter	Nominal output power	6,000 W
	Max. output current	27.2 A
	Nominal grid voltage	220 / 230 / 240 Vac
	Max. input current from grid	27.2 A
	Grid voltage range	184 V ~ 276 V
	Frequency range	45 Hz ~ 65 Hz
Off-Grid Output	Nominal output power	6,000 W
	Nominal voltage	220 / 230 / 240 Vac
	Nominal frequency	50 Hz / 60 Hz
	Nominal output current	27.2 A
	Output THDu	<2%
Battery Parameter	Battery type	Sodium-ion
	Nominal battery voltage	48 V
	Battery voltage range	33 V ~ 60 V
	Max. charging voltage	≤ 60 V
	Max. continuous discharge current	100 A
Efficiency	Max. efficiency/European efficiency	98%
	Max. battery charge/discharge efficiency	95%
General Parameters	Grid type	Single phase
	Dimension (W x H x D)	500 x 470 x 180 mm (19.6 x 18.5 x 7.1 in)
	Weight	23 kg (50.7 lb)
	Noise	< 25 dB (A)
	Operating temperature range	-25°C ~ +60°C (-22°F ~ 140°F)
	Cooling method	Natural cooling
	IP rating of enclosure	IP65
	Monitoring	LED / APP / WIFI / Bluetooth
	Communication port	RS485 / CAN / DRED / DO / Parallel port
Certification	CE_LVD	IEC 62109-1, IEC 62109-2, EN 62109-1, EN 62109-2
	CE_EMC	EN61000-6-1, EN61000-6-2, EN61000-6-3, EN61000-6-4
	Grid	VDE-AR-N 4105, C10-11, G99, CEI 0-21, EN50549, NRS 097-2-1

Hybrid Inverter H2 (PNH-10-04), Three Phase, On-Grid

Input (PV)	Max. input power	18,000 Wp
	Max. input voltage	800 V
	MPPT voltage range	130 V ~ 800 V
	Number of MPPTs	3
	Max. input string per MPPT	1 / 1 / 1
	Rated input voltage	600 V
	Starting voltage	140 V
	Max. input current	20 A / 20 A / 20 A
	Max. short-circuit current	24 A / 24 A / 24 A
On-Grid Parameter	Nominal output power	10 kW
	Max. output power	11 kW
	Max. input power from grid	20 kW
	Max. output current	16.7 A
	Nominal grid voltage	L / N / PE, 220 / 380 Vac, 230 / 400 Vac
Off-Grid Output	Grid voltage range	184 V ~ 276 V
	Nominal output power	10 kW
	Nominal voltage	L / N / PE, 220 / 380 Vac, 230 / 400 Vac
	Maximum output power	20 kVA (60s)
	Nominal output current	15.1 A / 14.4 A
Battery Parameter	Maximum output current	30.3 A
	Battery type	Sodium-ion
	Nominal battery voltage	48 V
	Battery voltage range	33 V ~ 60 V
	Max. charging voltage	≤ 60 V
	Maximum charge and discharge current	105 A
Efficiency	Nominal charge/discharge power	10,000 W
	Max. efficiency	98.2%
	European efficiency	97.7%
General Parameters	Max. battery charge/discharge efficiency	97.8%
	Grid type	Three phase
	Dimension (W x H x D)	465 x 665 x 165 mm (18.3 x 26.2 x 6.5 in)
	Weight	35 kg (77.2 lb)
	Noise	<45 dB (A)
	Operating temperature range	-25°C ~ +60°C (-22°F ~ 140°F)
	Cooling method	Intelligent air-cooling
	IP rating of enclosure	IP65
	Monitoring	LED / APP / WIFI / Bluetooth
Certification	Communication port	RS485 / CAN / DRED / DO / Parallel port
	CE_LVD	IEC 62109-1, IEC 62109-2, IEC62040-1
	CE_EMC	EN61000-6-1, EN61000-6-2, EN61000-6-3, EN61000-6-4 EN 61000-4-16, EN 61000-4-18, EN 61000-4-29
	Grid	VDE-AR-N 4105, VDE 0126-1-1, EN 50549-1, G98, G99, G100, CEI 0-21, AS/NZS4777.2, NRS 097-2-1

Hybrid Inverter H1 (PNH-5.5-02) , Single Phase, Off-Grid

Input (AC)	AC input power	5,500 W
	AC input voltage range	170 V ~ 280 V
	AC start voltage	120 V ~ 140 V
	Auto-restart voltage	180 V
	Nominal input current	23.9 A
	Max. input current	40 A
	Voltage frequency	50 Hz / 60 Hz
Input (PV)	Max. DC power	6,500 W
	Max. DC input voltage	500 V
	MPPT voltage range	120 V ~ 450 V
	Nominal input voltage	360 V
	Max. MPPT input current	13 A
	Number of MPPT input	1
	MPPT efficiency	99%
Input (Battery)	Nominal DC voltage	48 V
	Operating voltage range	37.8 V ~ 59.5 V
	Max. operating current	110 A
	AC Max. charge current	60 A
	PV Max. charge current	80 A
Output (Utility mode)	Grid adaptation	Single phase
	Nominal output power	5,500 W
	Nominal output voltage	230 Vac
	Output voltage frequency	47.5 Hz ~ 51.4 Hz / 59.3 Hz ~ 60.5 Hz
	Nominal output current	23.9 A
Output (Battery mode)	Apparent output power	5,500 W
	Nominal output voltage	230 Vac
	Voltage frequency	50 Hz / 60 Hz
Efficiency	Efficiency	97%
General parameters	Working temperature	-10°C ~ +40°C (14°F ~ 104°F)
	Operating humidity	0% RH ~ 90% RH
	Max. operating altitude	4,000 m (13,123ft.) Derating above 2,000 m
	Cooling mode	Forced air cooling
	Display	LCD
	Communication	RS232 / RS485 / CAN2.0
	Weight	11 kg (24.3 lb)
	Dimension (W x H x D)	350 x 450 x 125 mm (13.8 x 17.7 x 4.9 in)
	IP rating of enclosure	IP21