

Schneider Inverter

For United States

Power your home with sunshine and save money on electricity bills. The Schneider Inverter allows flexible solar system sizing and includes integrated MPPT optimization for maximum power output. It can be upgraded with Schneider Boost batteries for home backup power or to maximize self-consumption of your solar energy.

Flexible and Efficient Solar

- Supports solar arrays sizes from 3 to 15 kW
- Up to 15 kW solar power utilization
- Integrated MPPT optimization for maximum power output
- Supports complex solar array orientations on multiple roof surfaces
- Monitor energy in real time from anywhere, with the easy-to-use Schneider Home app
- Compatible with Schneider Home solutions: Simple, smart and sustainable solutions for home energy management
- 10 year warranty

Optional Home Backup Power

- Add the Schneider Boost battery to store solar energy and power your home when the grid is out
- Save money by using your battery when electricity rates are high
- Powerful 100 A LRA load start capability and 13.4 kW peak power
- High system efficiency with fewer steps of power conversion

Schneider Home

Inverter is part of Schneider Home, the first-of-its-kind integrated home energy solution. Schneider Home also includes:

- Schneider Boost 10 kWh battery
- Schneider Pulse
- Schneider X Series Wiring Devices*
- Schneider Energy Monitor
- Schneider Home app

* Matter-compatible models only



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Inverter Specifications

Schneider Inverter 7.7 (HY8K1NA1)	
Solar PV Input & Optimization	
Max. PV Array Size	15.4 kW DC @ STC
Max. Utilized Input Power[1]	15 kW at 30C / 12 kW at 40C
Max. Open Circuit Voltage (Voc)	600 Vdc
Optimization Type	Integrated 4 channel MPPT
MPPT Voltage Range	50 - 550 Vdc
Rated MPPT Range	200 - 480 Vdc
Startup Voltage	100 Vdc
Max. Useable Input Current (Imp)	12 A x 4
Max. Short Circuit Current (Isc)	16 A x 4
PV Over Voltage Category	II
PV Array Configuration	Ungrounded
Max Input Backfeed Current to PV	0 A
AC Output - Grid Tied	
Rated Continuous Output Power	7.68 kVA
Rated Grid Voltage	120/240 V (L1, L2 and N)[2]
Operating Voltage - Nominal (Range)	240 V (211 - 264 V)
Rated Continuous Current	32 A
AC Overcurrent Protective Device	40 A
Current THD	< 3%
Grid Frequency - Nominal (Range)	60 Hz (57 to 63 Hz)
Power Factor - Nominal (Range)	1.0 (0.8 lag to 0.8 lead)
AC Over Voltage Category	III
Night-time Power Consumption	15 W
AC Output - Backup Power	
Rated Continuous Backup Power	7.68 kW
Peak Output Power	13.4 kW (5 seconds)
Rated Continuous Current	32 A per phase
Peak Output Current	56 A (5 seconds)
Imbalanced Load Handling L-N	32 A continuous / 56 A peak
Load Start Capability	100 A LRA[3]
Voltage	Split-phase 120/240 V
Frequency	60 Hz +/- 0.1 Hz
Battery Charger - DC Output	
Battery Capacity	Up to 30 kWh (up to qty 3 Boost batteries)
Voltage Range	380 to 470 Vdc
Max. Charging Power	7.68 kW
Rated Continuous Charge Current	20 A
Conversion Efficiency	
PV to Grid	98% peak / 97% CEC

Schneider Inverter 7.7 - Continued	
Safety	
PV Disconnect Switch	Yes
PV AFCI	Yes
PV Insulation Measurement	Yes
PV Reverse Polarity	Yes
Rapid Shutdown	Integrated Sunspec Transmitter, compatible with APSmart RSD-S-PLC, RSD-D
Ground Fault Detection	Residual current monitoring
Battery Reverse Polarity	Yes
Anti-Islanding	Yes
Regulatory	
Safety	UL1741, UL 1741 PVRSS, UL1699B, UL9540[4], CSA C22.2 No. 107.1-16
Grid	UL1741 SA, UL1741 SB, IEEE1547-2018, CA Rule 21, PREPA
Emissions	FCC – Part 15 Subpart B Class B, ICES-003 Class B, RSS-Gen Issue 5
Seismic	AC 156
General Specifications	
Warranty	10 years
Communication	LAN & Wi-Fi included, cellular optional
Required for Backup	Schneider Boost battery and Pulse Backup Controller
Installation Specifications	
Maximum Operating Temperature[5]	-40°F to 140°F (-40°C to 60°C)
Storage Temperature	-40°F to 185°F (-40°C to 85°C)
Enclosure Type	Type 4X
Cooling Type	Natural convection
Max Operating Altitude	13100 ft (4000 m)
Operating Humidity	0 to 100% non-condensing
Dimensions (W x H x D)	25.6 x 22.4 x 6.5 in (650 x 570 x 165 mm)
Weight	102 lbs (46.4 kg)
Inverter Part Number	HY8K1NA1
Optional Accessories (purchased separately)	
Cellular Modem	SDG3NA5[6]

1. With parallel AC output and battery charging. 15 kW input requires at least 2 Boost batteries.
2. Neutral required. 208 V not supported
3. Load start capability may vary
4. UL9540 Energy Storage System certification with Schneider Boost battery
5. Maximum continuous power is de-rated above 113°F (45°C)
6. Secondary internet connectivity for Schneider Inverter & Boost systems. Either Wi-Fi or Ethernet connection is required as a primary internet connection.

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