

# 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
- 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
- Reliable backup power with the Inverter's 15.4 kW surge power capability
- High system efficiency with fewer steps of power conversion

## Schneider Home

Schneider Home offers a simple, smart, and sustainable solution to manage energy, tailored to your needs.

- Schneider Inverter
- Schneider Boost 10 kWh battery
- Schneider Pulse
- Connected Switches, Dimmers, and Outlets
- Schneider Home app



Schneider Home app, Inverter, Boost, and Pulse

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Electric

# Inverter Specifications

## Schneider Inverter 7.7 (HY8K1NA1)

### Solar PV Input & Optimization

Max. PV Array Size	15.4 kWp STC
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. Input Operating 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 <sup>1</sup>	120/240 V (L1, L2 and N)
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	15.4 kW (10 seconds)
Rated Continuous Current	32 A per Phase
Peak Output Current	64 A (10 seconds)
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	97% CEC Efficiency
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## 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, UL1741 PCS <sup>2</sup> , UL 1741 PVRSS <sup>2</sup> , UL1699B, UL9540 <sup>2</sup> , CSA C22.2 No. 107.1-16
Grid	UL1741 SA, UL1741 SB, IEEE1547-2018, CA Rule 21, HECO SRD 2.0 <sup>2</sup> , PREPA <sup>2</sup>
Emissions	FCC – Part 15 Subpart B Class B, ICES-003 Class B, RSS-Gen Issue 5 <sup>2</sup>
Seismic	AC 156

### General Specifications

Warranty	10 years
Revenue Grade Metering	Yes
Communication	LAN & Wi-Fi included, Cellular optional
Required for Backup	Schneider Boost battery and Pulse Backup Controller

### Installation Specifications

Maximum Operating Temperature <sup>3</sup>	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	88 lbs (40 kg)
Inverter Part Number	HY8K1NA1

### Accessories (Purchased separately)

Cellular Modem, LTE-M/ NB-IoT, 5 years data plan	SDG3NA5
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1. Neutral required. 208 V not supported at this time

2. Pending

3. Maximum continuous power is de-rated above 113F (45C)

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