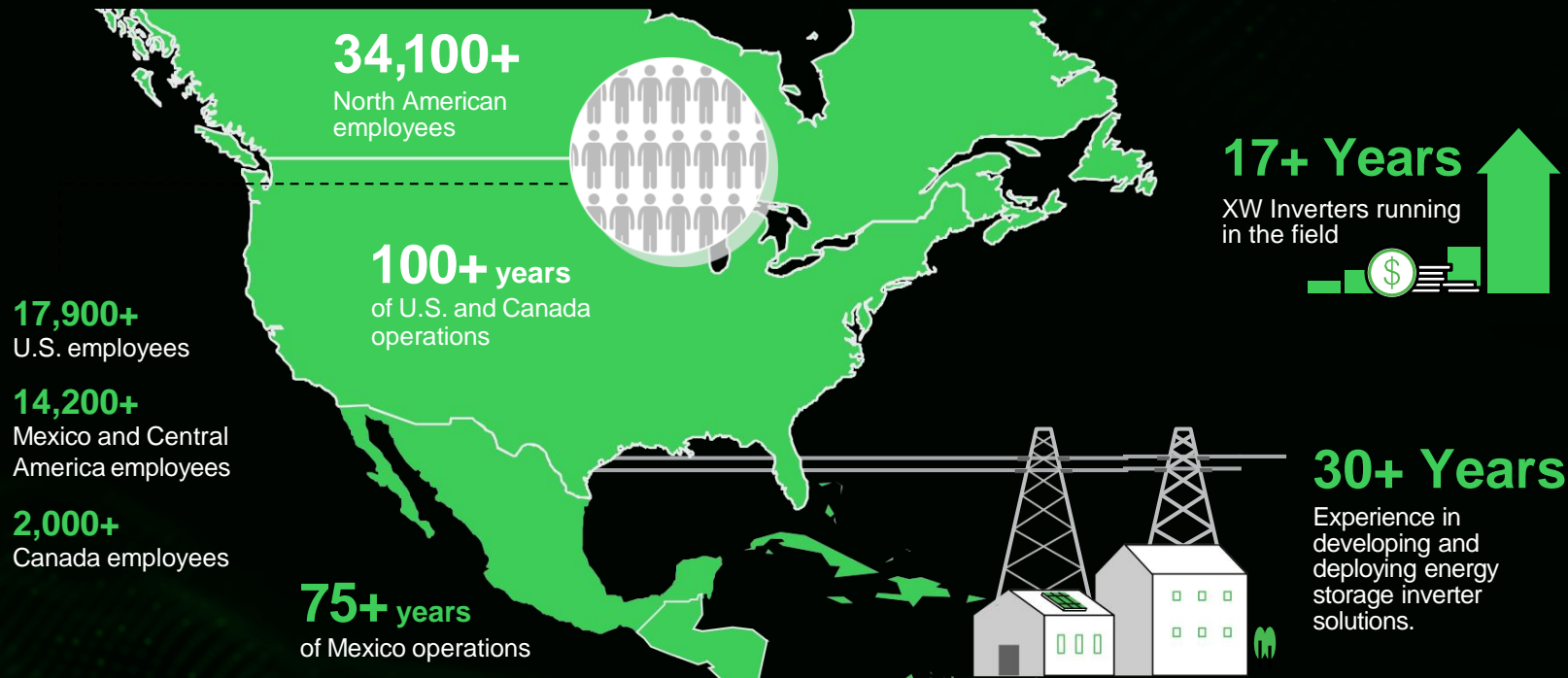


# Schneider Home

Reimagining Energy Management

Presented By: Jeff Gill

# Schneider Electric in North America



evconnect

Qmerit

energysage



uplight

SQUARE



APC

# The challenge of an electric home energy landscape

Residential electricity demand is expected to increase up to **18% by 2030** and **38% by 2035**.

Today, homeowners can:

- Install solar to produce their own energy
- Add battery storage for backup power
- Charge electric vehicles
- Upgrade to electric appliances

...but many homes' **electrical infrastructure** may not support this.

**48M homes** in the US will need a panel or service upgrade to fully electrify.

Brigham, K. (2023, Jul 1). *Why the electric vehicle boom could put a major strain on the U.S. power grid*. CNBC.

<https://www.cnbc.com/2023/07/01/why-the-ev-boom-could-put-a-major-strain-on-our-power-grid.html>.

Merski, C. (2021, Aug 32). *Addressing an Electrification Roadblock: Residential Electric Panel Capacity*. Pecan Street.

<https://www.pecanstreet.org/2021/08/panel-size/#:~:text=Pecan%20Street%27s%20new%20analysis%20found,with%20a%20big%20price%20tag.>

# Why Schneider?

## TODAY

Solar + Storage introduces complex systems, app proliferation



## TOMORROW

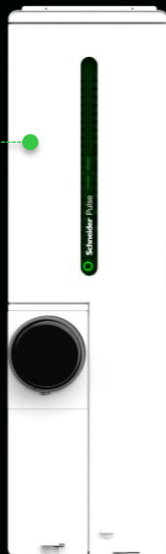
Schneider Home redefines the home energy management experience



# Schneider Home Line of Products

## Schneider Pulse

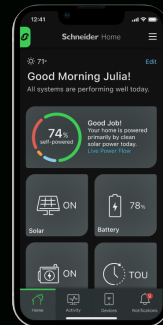
Smart Panel  
Smart Circuits  
Energy Monitor



## Schneider Inverter



## Schneider X Series Connected Switches, Dimmers and Outlets



## Schneider Home Single App

## Schneider Boost Battery

# Schneider Pulse CSED Panel

The Schneider Pulse panel is the heart of the electrified home, interconnecting various energy sources to the grid.

## Space savings

- Streamlines installation by consolidating five enclosures into one - microgrid interconnect device switch, critical load panel, consumption monitoring box, load control box, meter socket

## Future-proof solution

- Integrates solar, battery, generator, and EV charging as well as monitor and control at the breaker and device level

## Leading edge codes and standards

- Fully certified system provides a code-compliant solution for all solar, storage, EV and home electrification opportunities
- California Title 24 and NEC2020 compliant

### Connected Smart Panel

200A main service panel with integrated meter socket

### Split Bus

Avoid additional subpanel and load relocation for essential loads

### Load Management Ready

Schneider Energy Monitor factory installed to monitor home energy usage

### Power Distribution Block

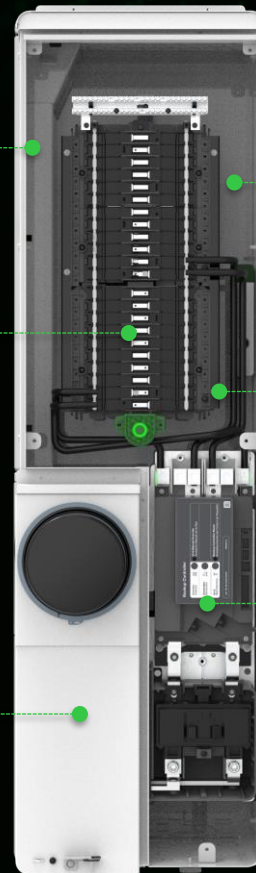
Allows easy connection of transfer switch, field configurable from partial home to whole home backup

### Integrated Backup Controller

Save installation time and space on the wall

### Generator Control

COMING IN 2025



# The leading load control solution

## Modular and future-proof load monitoring and control

### Home energy monitoring

- Monitor whole home energy consumption by installing Square D Control Relays for circuit level monitoring, Schneider X Series Matter devices for device level monitoring, and/or Schneider Energy Monitor for self-detectable appliance and device monitoring.

### Lower power mode

- Create a low power profile and activate anytime from the Schneider Home app to conserve energy when away from home

### Controllable circuits

- Turn circuits on or off from the Schneider Home app to conserve energy on demand

### Scheduled TOU load shedding\*

- Schedule select circuits to turn off during peak Time of Use rates if they are non-essential at that time of the day

### Backup power load management

- Turn circuits off as needed from the Schneider Home app to extend battery life during a grid outage or reduce power consumption if a backup power system is overloaded. When paired with Schneider Boost, automatically shed selected loads upon transition to backup power.

\*Available now with Schneider Inverter and Boost battery. Coming soon with third party systems.



Square D Control Relay

Schneider Energy Monitor



Schneider X Series  
Matter Devices

# Schneider Inverter and Boost Battery

Power your home with renewable energy, save on electricity bills and enjoy **protection from power outages**.

## Schneider Inverter

### Robust and reliable performance

- Hybrid inverter
- 7.7 kW continuous power
- Up to 15 kW surge capability
- 10-year warranty

### Flexible and efficient solar

- Supports solar array sizes from 3 kW to 15 kW
- Integrated MPPT optimization for maximum power output
- DC or AC coupling configurations
- Indoor or outdoor installation



## Schneider Boost

### Reliable backup power

- 10kWh battery capacity
- Stackable up to three batteries per inverter
- LFP chemistry with UL9540A
- 10-year warranty

### Easy installation

- Slim design at just 5" deep
- Lifting handles provided for easy handling
- Floor or wall mount
- Indoor or outdoor installation

# What if I don't need a main panel upgrade?

The Pulse Backup Controller **automatically disconnects from the grid** during an outage, allowing the system to provide backup power.

## Built in QO breaker panel for backup or non-backup loads

- 12 breaker spaces compatible with QO circuit breakers for whole home or partial home backup. Tandem breaker compatibility for more circuits

## Easy and flexible installation

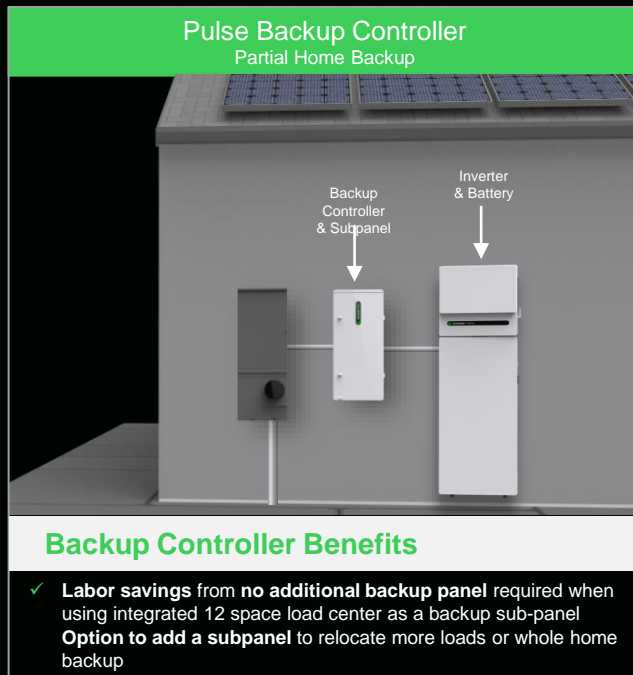
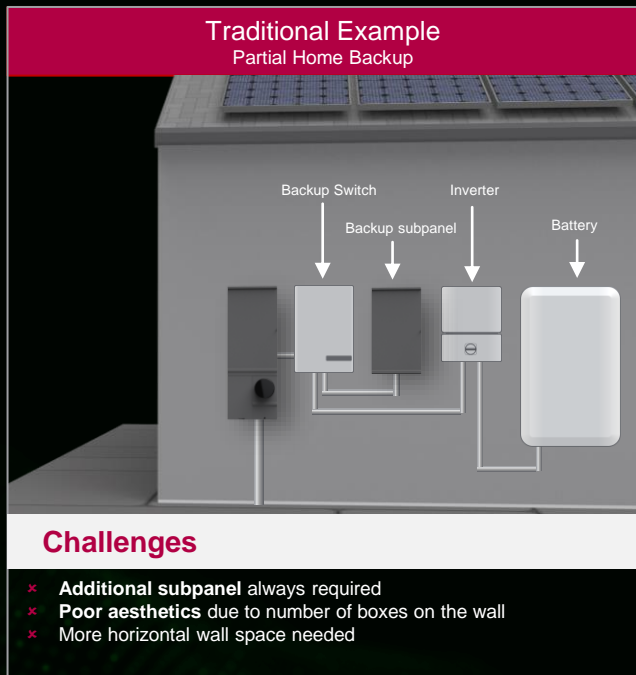
- Up to 3 boxes in one (Backup Controller MID, backup subpanel, and optional load control) for fewer electrical boxes on the wall and load relocation time savings
- Remove large non-critical loads from backup if used for non-backup loads

## Load management ready

- Add smart relays for load control at the breaker level
- Add energy monitor to monitor whole home energy usage



# Avoid main panel upgrade with Pulse Backup Controller



# Schneider Home App: Redefining Home Energy Management

Monitor, control and automate an entire home energy ecosystem

## Simplicity

- Easily manages everything from solar, battery, generator and EV charging loads

## Cost & Energy Savings

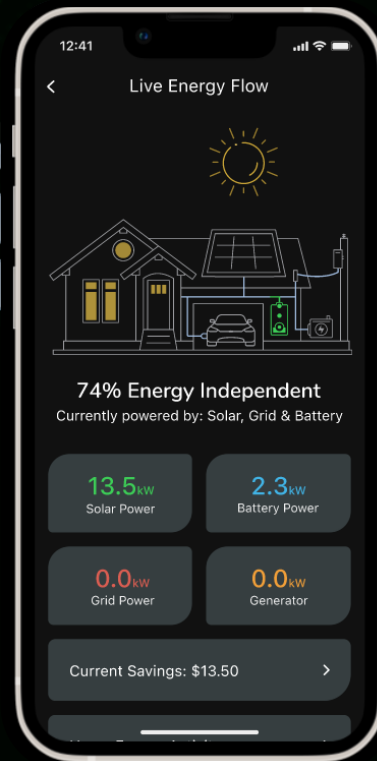
- Optimizes energy use to save energy and money without sacrificing comfort.
- Offers energy-saving settings to automate energy use and cost savings.
- Imports electricity rate to prioritize use of stored energy during peak rate times.
- Provides monitoring and control of energy consumption down to the device level
- Expedites return on investment through smarter energy usage

## Always-on power

- Extends backup time during an outage with notifications to shed non-critical loads
- Preps for impending storms by prioritizing charging the battery.

## More sustainable home

- Reduces environmental impact by prioritizing the most sustainable energy source.

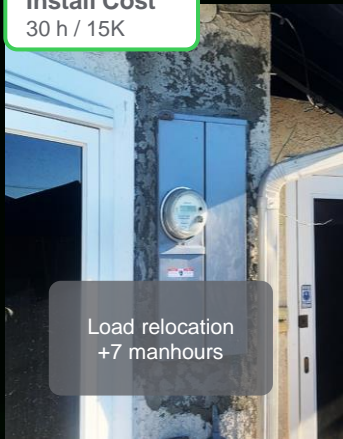


# Retrofit Whole-Home Backup with Main Panel Upgrade

## Conventional Solution

### Install Cost

30 h / 15K



Load relocation  
+7 manhours



MID installation  
+3 manhours



*"I was able to complete the MPU + Solar + Battery job one day quicker"*  
– Victor Chacon, Baker Home Energy

**Baker  
Electric**  
Established 1938

## Schneider Home

### Install Cost

20 h / 11.5K



### Savings of

- 10 manhours
- \$ 3,500

### Faster & Cleaner Install

- Split bus - no load relocation
- MID included in the Pulse panel
- Shorten installation from 3 days to 2 days
- Can increase # of installs by 40% / year

Job Type: 7kW Solar + 10kWh Battery. Whole-home backup with 20 loads backed up.

# New Home Builds: Simplify Install, Scale in the Future

## Conventional Solution

### Install Cost

11 h / 12K



Sub panel  
installation  
+2 manhours

MID installation  
+2 manhours

*"We care about simplicity, reliability and elegance. The Schneider brand brings that. Having SUA will be game changer"*  
- Pulte Homes



## Schneider Home

### Install Cost

7 h / 9.5K



### Savings of

- 4 manhours
- \$ 2,600

## Simple, Affordable & Scalable

- Complete battery job in 1 day
- Flexibility for homebuyer's needs
- Load control easily added in the future

THANK YOU.



# Hurricane Beryl slams into Texas

July 8, 2024



**Srikar Vadlamani**

*"During the Hurricane, the Schneider system kept the whole home's power backup for 4 days and a half! I was even able to use the 3.5-ton AC unit"*



Schneider Pulse Backup Controller, Schneider Inverter, 3 x Schneider Boost, Square D Smart Relays

Hurricane Beryl slammed into Texas knocking out power to nearly 3 million homes and businesses. Texas state and local officials warned it may take several days to restore power after Beryl came ashore as a Category 1 hurricane and toppled 10 transmission lines and knocked down trees that took down power lines.



# What's next?

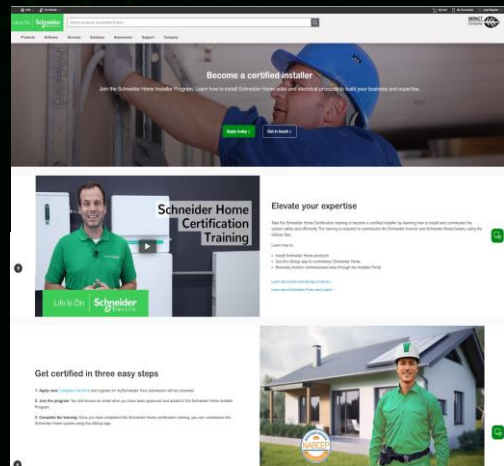
Join the Schneider Home Installer Program in **three easy steps**:

1. **Create a mySchneider account.** Fill in complete company information. For business type, select **Solar Installer**.
2. **Get certified.** Complete the Schneider Home Certification training to commission the Schneider Home system using the eSetup app.

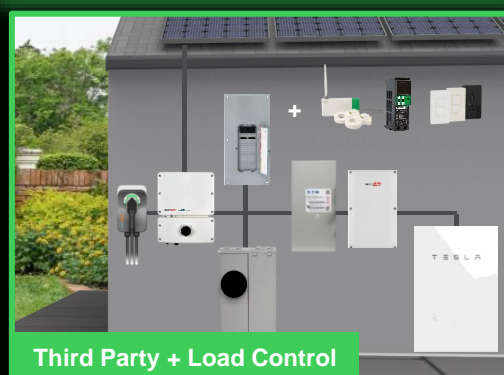
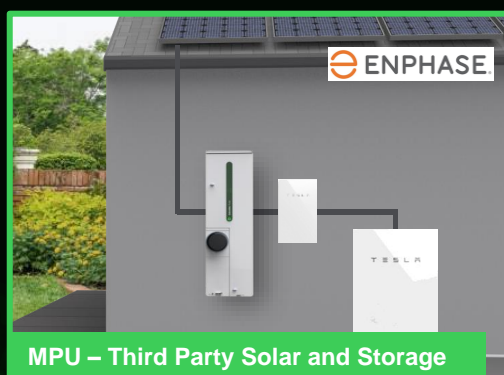
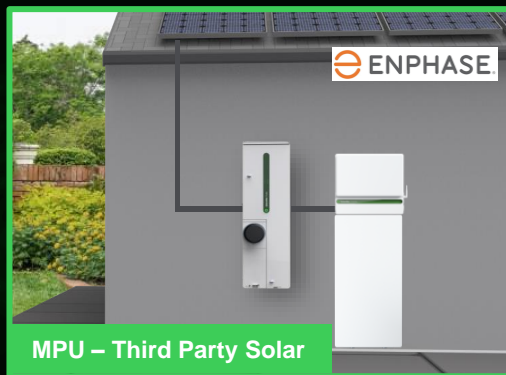
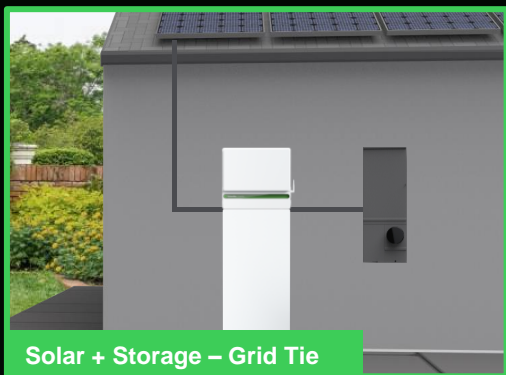


Take the **Schneider Home Certification** training to become a Schneider Home Certified Installer and earn NABCEP Credits.

Schneider Home Certification training is **required** to use the eSetup app to commission the Schneider Inverter and Schneider Boost.



# Schneider Home Solutions



Life Is On

**Schneider**  
Electric


# Why Schneider - Bankability

As of January 2025 Schneider Electric has a market cap of \$145.39 Billion USD. This makes Schneider Electric the world's 99th most valuable company by market cap according to our data. The market capitalization, commonly called market cap, is the total market value of a publicly traded company's outstanding shares and is commonly used to measure how much a company is worth.

### Schneider Electric Revenue Hits Record High

By *Nina Kientle* [Follow](#)  
Oct. 30, 2024 3:23 am ET

[Share](#) [Resize](#) [Listen \(1min\)](#)



Schneider Electric third-quarter revenue rose to record levels on continued strength in energy

<u>Company</u>	<u>Market Cap (\$B)</u>
	\$1,295
	\$145.0
	\$9.5
	\$9.0
	\$2.2
	\$0.8
	Private
	Private

# Technical Support

## Product Support

Product information, specifications, pricing, installation guides, FAQs, order placement, partner program, etc.

## Support Hours

Our Customer Care Center will be on standby to address your needs.

Monday – Friday 8AM to 8PM EST

### After Hours:

Monday – Friday 8PM to 11PM EST

Saturday – Sunday 8AM to 5PM

## Call 1-877-SEHOME1

Dedicated phone number for technical support on Schneider Home.



## Swift Resolution

Our Customer Care Center is committed to providing you a resolution through remote troubleshooting.

## Warranty and Replacements

Pick up your replacement product at your local Greentech location or have it shipped to you in 3-5 business days.

## Labor Reimbursement

Schneider Electric will reimburse your **labor** costs for product replacements under warranty.  
(see Labor Reimbursement notice for details)

# Schneider Pulse CSED



## Technical Specifications

Product Type	Combination Service Entrance Device
Range	QO™
Meter Socket	Ringed, no Bypass Meets EUSERC Specifications
Service Feed	Overhead / Underground (OH / UG)
Ampere Rating	200 A Maximum
Busbar Rating	225 A
Short-circuit Current	22 kA
Mounting	Semi-flush
Connections	Plug-on Neutral
Number of Total Spaces	44 (4 used by submains, 2 used by SPD, 2 used by monitor)
Number of Usable Spaces	36 (18 top interior, 18 bottom interior)
Battery Charging Sources	Solar, Grid, Generator
Submain rating	125 A (both top and bottom interiors)
Maximum solar back-feed	145 A
Power Distribution Block	Factory installed
Backup Controller (Microgrid Interconnect Device)	Available as factory or field installed
Dimensions (W x H x D)	14.3" x 51.9" x 9.7"
Schneider Pulse CSED Part Number	CC18X18M200PCY
Schneider Pulse CSED with Backup Controller Part Number	CC18X18M200PCZ

# Schneider Inverter



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 - 560 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

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

# Schneider Boost



System Information	10 kWh	20 kWh	30 kWh
Boost Battery Capacity			
Battery Qty	1	2	3
Usable Energy Capacity	10 kWh	20 kWh	30 kWh
AC Charge/Discharge Power - Paired with Schneider Inverter 7.7			
Continuous Output Power - Backup	7.68 kW		
Peak Output Power - Backup	15.4 kW (10 seconds)		
Continuous Output Power - Grid-Tied	5 kVA	7.68 kVA	7.68 kVA
Charge Power	5 kW	7.68 kW	7.68 kW
Compatibility			
Required for Backup Power	Schneider Pulse Backup Controller		
Required Inverter	Schneider Inverter 7.7 (HY8K1NA1)		
# of Batteries	3 Maximum		
Battery Charging Sources	Solar, Grid		

Boost Battery Specifications (BAT10K1)	
Electrical Specifications - Battery Port	
Battery Voltage - Nominal / Max	422.4 / 468 V
Nominal Discharge Current	20 A
Max. Continuous Discharge Power	8.1 kW
Nominal Charge Current	14 A
Max. Continuous Charge Power	5.2 kW
Nameplate Energy Capacity	10.56 kWh
Installation Specifications - Each Battery	
Maximum Operating Temperature Range	5 to 131°F (-15 to 55°C)
Recommended Temperature Range	32 to 86°F (0 to 30°C)
Storage Temperature	14 to 104°F (-10 to 40°C)
Enclosure Type	Type 4X
Maximum Altitude	13100 ft (4000 m)
Operating Humidity	0 to 100% Non-Condensing
Inverter Dimensions (W x H x D)	25.6 x 26.6 x 6.5 in (650 x 570 x 165 mm)
Battery Dimensions (W x H x D)	25.6 x 51.2 x 5.1 in (650 x 1300 x 130 mm)
Battery Weight	279 lb (127 kg)
Battery Disconnect	Yes
Battery Installation	Wall, Floor
Battery Part Number	BAT10K1, BAT-10
Inverter Part Number	HY8K1NA1

Boost Battery Specifications - Continued	
Regulatory	
Safety	UL9540*, UL9540A, UL1973
Emissions	FCC Part 15 Class B
General	
Warranty	≥70% Capacity for the earlier of 10 Years, or 30 MWh throughput
Chemistry	LFP
* Pending	

Accessories (Purchased separately)	
Front to Back Stacking Kits	
2 Stack Batteries Floor Mount	BA10KNA2S
3 Stack Batteries Floor Mount <sup>1</sup>	BA10KNA3S

1: When stacking 3 batteries front to back, the inverter must not be installed above the batteries.