### $T \equiv 5 L F$

#### Customer

Allaire Residence 3812 Mission Peak, Palm Springs, CA 92262

#### Solar

Quantity: 36 Panels System Size: 12.24 kW

Est. Annual Production: 20423 kWh

#### **Powerwall**

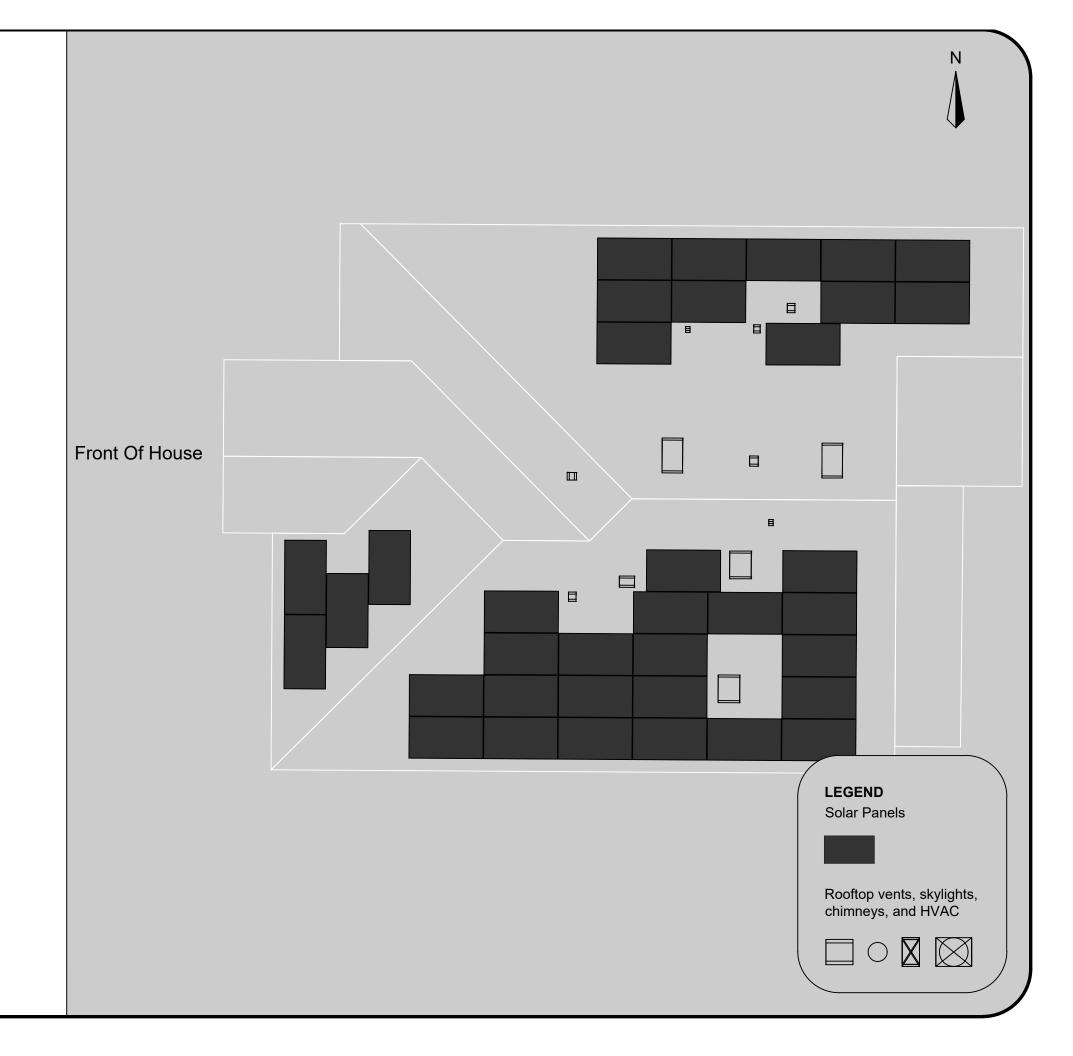
Quantity: 3 Powerwalls

Backup Type: Whole Home

#### **Equipment Location**

Your solar inverter(s), Energy Gateway, Powerwall(s) and any additional equipment will be installed near your utility electric meter.

At the beginning of installation, the Tesla crew lead will discuss with you the exact location based on your preference and install feasibility.



# Single Phase Inverter with HD-Wave Technology

#### for North America

SE3000H-US / SE3800H-US / SE5000H-US / SE6000H-US / SE7600H-US / SE10000H-US / SE11400H-US





#### Optimized installation with HD-Wave technology

- Specifically designed to work with power optimizers
- Record-breaking efficiency
- Quick and easy inverter commissioning directly from a smartphone using the SolarEdge SetApp
- Fixed voltage inverter for longer strings
- Integrated arc fault protection and rapid shutdown for NEC 2014 and 2017, per article 690.11 and 690.12

- UL1741 SA certified, for CPUC Rule 21 grid compliance
- Extremely small
- Built-in module-level monitoring
- Outdoor and indoor installation
- Optional: Revenue grade data, ANSI C12.20 Class 0.5 (0.5% accuracy)



solaredge.com

## / Single Phase Inverter with HD-Wave Technology for North America

SE3000H-US / SE3800H-US / SE5000H-US / SE6000H-US/ SE7600H-US / SE10000H-US / SE11400H-US

	SE3000H-US	SE3800H-US	SE5000H-US	SE6000H-US	SE7600H-US	SE10000H-US	SE11400H-US	
APPLICABLE TO INVERTERS WITH PART NUMBER				SEXXXXH-XXXXXBXX	(4			
OUTPUT								
Rated AC Power Output	3000	3800 @ 240V 3300 @ 208V	5000	6000 @ 240V 5000 @ 208V	7600	10000	11400 @ 240V 10000 @ 208V	VA
Maximum AC Power Output	3000	3800 @ 240V 3300 @ 208V	5000	6000 @ 240V 5000 @ 208V	7600	10000	11400 @ 240V 10000 @ 208V	VA
AC Output Voltage MinNomMax. (211 - 240 - 264)	✓	✓	<b>√</b>	<b>√</b>	✓	✓	✓	Vac
AC Output Voltage MinNomMax. (183 - 208 - 229)	-	✓	-	<b>√</b>	-	-	✓	Vac
AC Frequency (Nominal)				59.3 - 60 - 60.5 <sup>(1)</sup>				Hz
Maximum Continuous Output Current @240V	12.5	16	21	25	32	42	47.5	А
Maximum Continuous Output Current @208V	-	16	-	24	-	-	48.5	А
Power Factor			1	, adjustable -0.85 to 0	0.85			
GFDI Threshold				1				А
Utility Monitoring, Islanding Protection, Country Configurable Thresholds				Yes				
INPUT								
Maximum DC Power @240V	4650	5900	7750	9300	11800	15500	17650	W
Maximum DC Power @208V	-	5100	-	7750	-	-	15500	W
Transformer-less, Ungrounded				Yes				
Maximum Input Voltage				480				Vdc
Nominal DC Input Voltage		3	80			400		Vdc
Maximum Input Current @240V <sup>(2)</sup>	8.5	10.5	13.5	16.5	20	27	30.5	Adc
Maximum Input Current @208V(2)	-	9	-	13.5	-	-	27	Adc
Max. Input Short Circuit Current				45				Adc
Reverse-Polarity Protection				Yes				
Ground-Fault Isolation Detection				600kΩ Sensitivity				
Maximum Inverter Efficiency	99			9	99.2			%
CEC Weighted Efficiency			Ġ	99			99 @ 240V 98.5 @ 208V	%
Nighttime Power Consumption				< 2.5				W

<sup>(1)</sup> For other regional settings please contact SolarEdge support

<sup>&</sup>lt;sup>(2)</sup> A higher current source may be used; the inverter will limit its input current to the values stated

## / Single Phase Inverter with HD-Wave Technology for North America

SE3000H-US / SE3800H-US / SE5000H-US / SE6000H-US/ SE7600H-US / SE10000H-US / SE11400H-US

	SE3000H-US	SE3800H-US	SE5000H-US	SE6000H-US	SE7600H-US	SE10000H-US	SE11400H-US	
ADDITIONAL FEATURES								
Supported Communication Interfaces		RS485, Ethernet, ZigBee (optional), Cellular (optional)						
Revenue Grade Data, ANSI C12.20				Optional <sup>(3)</sup>				
Inverter Commissioning		with the SetApp mobile application using built-in Wi-Fi station for local connection						
Rapid Shutdown - NEC 2014 and 2017 690.12		Automatic Rapid Shutdown upon AC Grid Disconnect						
STANDARD COMPLIANCE								
Safety		UL1741	, UL1741 SA, UL1699B	, CSA C22.2, Canadiar	AFCI according to T.	I.L. M-07		
Grid Connection Standards		IEEE1547, Rule 21, Rule 14 (HI)						
Emissions				FCC Part 15 Class B				
INSTALLATION SPECIFICAT	TIONS							
AC Output Conduit Size / AWG Range		3/	'4" minimum / 14-6 A'	WG		3/4" minimu	m /14-4 AWG	
DC Input Conduit Size / # of Strings / AWG Range					strings / 14-6 AWG			
Dimensions with Safety Switch (HxWxD)		17.7 x	14.6 x 6.8 / 450 x 37	0 x 174		21.3 x 14.6 x 7.3	/ 540 x 370 x 185	in / mm
Weight with Safety Switch	22 ,	/ 10	25.1 / 11.4	26.2	/ 11.9	38.8	/ 17.6	lb / kg
Noise		<	25			<50		dBA
Cooling				Natural Convection				
Operating Temperature Range				40 to +140 / -40 to +6	0(4)			°F/°C
Protection Rating			NEMA	4X (Inverter with Safet	y Switch)			

<sup>(3)</sup> Revenue grade inverter P/N: SExxxxH-US000BNC4



<sup>(4)</sup> Full power up to at least 50°C / 122°F; for power de-rating information refer to: https://www.solaredge.com/sites/default/files/se-temperature-derating-note-na.pdf



### Q.PEAK DUO BLK-G6+/SC

330-345

**ENDURING HIGH** PERFORMANCE









#### Q.ANTUM TECHNOLOGY: LOW LEVELIZED COST OF ELECTRICITY

Higher yield per surface area, lower BOS costs, higher power classes, and an efficiency rate of up to 19.5%.



#### **INNOVATIVE ALL-WEATHER TECHNOLOGY**

Optimal yields, whatever the weather with excellent low-light and temperature behavior.



#### ENDURING HIGH PERFORMANCE

Long-term yield security with Anti LID and Anti PID Technology<sup>1</sup>, Hot-Spot Protect and Traceable Quality Tra.Q™.



#### ZEP COMPATIBLE™ FRAME DESIGN

High-tech black Zep Compatible™ frame, for improved aesthetics, easy installation and increased safety.



#### A RELIABLE INVESTMENT

Inclusive 25-year product warranty and 25-year linear performance warranty<sup>2</sup>.



#### STATE OF THE ART MODULE TECHNOLOGY

Q.ANTUM DUO combines cutting edge cell separation and innovative wiring with Q.ANTUM Technology.

#### THE IDEAL SOLUTION FOR:



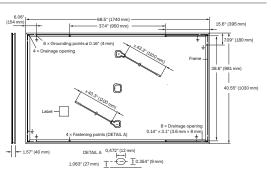
Engineered in Germany

commercial and industrial buildings



#### **MECHANICAL SPECIFICATION**

Format	$68.5\times40.6\times1.57$ in (including frame) $(1740\times1030\times40\text{mm})$
Weight	47.4 lbs (21.5 kg)
Front Cover	0.13in (3.2mm) thermally pre-stressed glass with anti-reflection technology
Back Cover	Composite film
Frame	Black anodized aluminum
Cell	6 × 20 monocrystalline Q.ANTUM solar half cells
Junction Box	$2.09$ - $3.98\times1.26$ - $2.36\times0.59$ - $0.71$ in (53-101 $\times$ 32-60 $\times$ 15-18 mm), Protection class IP67, with bypass diodes
Cable	4 mm² Solar cable; (+) ≥43.3 in (1100 mm), (-) ≥43.3 in (1100 mm)
Connector	Stäubli MC4; IP68

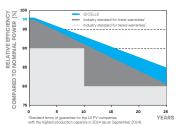


#### **ELECTRICAL CHARACTERISTICS**

VER CLASS			330	335	340	345
IIMUM PERFORMANCE AT STANDAR	D TEST CONDITIO	NS, STC¹ (POW	/ER TOLERANCE +5 W / -0	)W)		
Power at MPP <sup>1</sup>	P <sub>MPP</sub>	[W]	330	335	340	345
Short Circuit Current <sup>1</sup>	I <sub>sc</sub>	[A]	10.41	10.47	10.52	10.58
Open Circuit Voltage <sup>1</sup>	Voc	[V]	40.15	40.41	40.66	40.92
Current at MPP	I <sub>MPP</sub>	[A]	9.91	9.97	10.02	10.07
Voltage at MPP	$V_{\text{MPP}}$	[V]	33.29	33.62	33.94	34.25
Efficiency <sup>1</sup>	η	[%]	≥18.4	≥18.7	≥19.0	≥19.3
IIMUM PERFORMANCE AT NORMAL	OPERATING CONE	DITIONS, NMO	$\Gamma^2$			
Power at MPP	P <sub>MPP</sub>	[W]	247.0	250.7	254.5	258.2
Short Circuit Current	I <sub>sc</sub>	[A]	8.39	8.43	8.48	8.52
Open Circuit Voltage	Voc	[V]	37.86	38.10	38.34	38.59
Current at MPP	I <sub>MPP</sub>	[A]	7.80	7.84	7.89	7.93
Voltage at MPP	V <sub>MPP</sub>	[V]	31.66	31.97	32.27	32.57
	Power at MPP¹ Short Circuit Current¹ Open Circuit Voltage¹ Current at MPP Voltage at MPP Efficiency¹ NIMUM PERFORMANCE AT NORMAL Power at MPP Short Circuit Current Open Circuit Voltage Current at MPP	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	NIMUM PERFORMANCE AT STANDARD TEST CONDITIONS, STC¹ (POW Power at MPP¹	NIMUM PERFORMANCE AT STANDARD TEST CONDITIONS, STC¹ (POWER TOLERANCE +5W/-CPOWER at MPP¹   PMPP   [W]   330   3	NIMUM PERFORMANCE AT STANDARD TEST CONDITIONS, STC¹ (POWER TOLERANCE +5 W / −0 W)   Power at MPP¹	NIMUM PERFORMANCE AT STANDARD TEST CONDITIONS, STC¹ (POWER TOLERANCE $+5W/-0W$ )

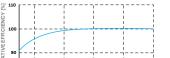
 $^{1}\text{Measurement tolerances P}_{\text{MPP}} \pm 3\%; |_{\text{SC}}; V_{\text{CC}} \pm 5\% \text{ at STC}: 1000 \text{ W/m}^{2}, 25 \pm 2^{\circ}\text{C}, \text{AM 1.5 according to IEC 60904-3} \cdot ^{2}800 \text{ W/m}^{2}, \text{NMOT, spectrum AM 1.5}$ 

#### Q CELLS PERFORMANCE WARRANTY



At least 98% of nominal power during first year. Thereafter max. 0.54% degradation per year. At least 93.1% of nominal power up to 10 years. At least 85% of nominal power up to

es. Full warranties in accordance with the warranty terms of the Q CELLS sales organization of your respective



PERFORMANCE AT LOW IRRADIANCE

Typical module performance under low irradiance conditions in comparison to STC conditions (25°C, 1000 W/m²)

TEMPERATURE COEFFICIENTS							
Temperature Coefficient of I <sub>sc</sub>	α	[%/K]	+0.04	Temperature Coefficient of Voc	β	[%/K]	-0.27
Temperature Coefficient of P <sub>MPP</sub>	γ	[%/K]	-0.36	Normal Module Operating Temperature	NMOT	[°F]	109±5.4 (43±3°C)

#### PROPERTIES FOR SYSTEM DESIGN

Maximum System Voltage V <sub>SYS</sub>	[V]	1000 (IEC)/1000 (UL)	Protection Class	II
Maximum Series Fuse Rating	[A DC]	20	Fire Rating based on ANSI/UL 1703	C (IEC)/TYPE 2 (UL)
Max. Design Load, Push / Pull (UL)3	[lbs/ft <sup>2</sup> ]	50 (2400 Pa) / 50 (2400 Pa)	Permitted Module Temperature	-40°F up to +185°F
Max. Test Load, Push / Pull (UL)3	[lbs/ft <sup>2</sup> ]	75 (3600 Pa) / 75 (3600 Pa)	on Continuous Duty	(-40°C up to +85°C)

#### **QUALIFICATIONS AND CERTIFICATES**

UL 1703, CE-compliant, IEC 61215:2016, IEC 61730:2016,



<sup>3</sup>See Installation Manual







400 Spectrum Center Drive, Suite 1400, Irvine, CA 92618, USA | TEL +1 949 748 59 96 | EMAIL inquiry@us.q-cells.com | WEB www.q-cells.us

 $<sup>^{\</sup>rm 1}$  APT test conditions according to IEC/TS 62804-1:2015, method B (–1500 V, 168 h)  $^{\rm 2}$  See data sheet on rear for further information

#### POWERWALL

Tesla Powerwall is a fully-integrated AC battery system for residential or light commercial use. Its rechargeable lithium-ion battery pack provides energy storage for solar self-consumption, time-based control, and backup.

Powerwall's electrical interface provides a simple connection to any home or building. Its revolutionary compact design achieves market-leading energy density and is easy to install, enabling owners to quickly realize the benefits of reliable, clean power.



#### PERFORMANCE SPECIFICATIONS

AC Voltage (Nominal)         120/240 V           Feed-In Type         Split Phase           Grid Frequency         60 Hz	
Grid Frequency 60 Hz	
141346	
Total Energy <sup>1</sup> 14 kWh	
Usable Energy <sup>1</sup> 13.5 kWh	
Real Power, max continuous <sup>2</sup> 5 kW (charge and discharge	je)
Real Power, peak (10s, off-grid/backup) <sup>2</sup> 7 kW (charge and discharge	je)
Apparent Power, max continuous 5.8 kVA (charge and disch	arge)
Apparent Power, peak (10s, off-grid/backup) 7.2 kVA (charge and disch	arge)
Maximum Supply Fault Current 10 kA	
Maximum Output Fault Current 32 A	
Overcurrent Protection Device 30 A	
Imbalance for Split-Phase Loads 100%	
Power Factor Output Range +/- 1.0 adjustable	
Power Factor Range (full-rated power) +/- 0.85	
Internal Battery DC Voltage $$50\ \lor$	
Round Trip Efficiency <sup>1,3</sup> 90%	

<sup>&</sup>lt;sup>1</sup>Values provided for 25°C (77°F), 3.3 kW charge/discharge power.

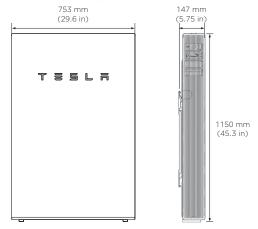
#### COMPLIANCE INFORMATION

Certifications	UL 1642, UL 1741, UL 1973, UL 9540, IEEE 1547, UN 38.3
Grid Connection	Worldwide Compatibility
Emissions	FCC Part 15 Class B, ICES 003
Environmental	RoHS Directive 2011/65/EU
Seismic	AC156, IEEE 693-2005 (high)

#### MECHANICAL SPECIFICATIONS

Dimensions <sup>1</sup>	1150 mm x 753 mm x 147 mm (45.3 in x 29.6 in x 5.75 in)
Weight <sup>1</sup>	114 kg (251.3 lbs)
Mounting options	Floor or wall mount

 $^{\rm 1}{\rm Dimensions}$  and weight differ slightly if manufactured before March 2019. Contact Tesla for additional information.



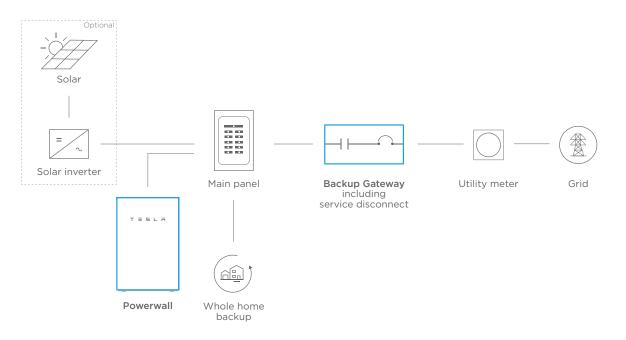
#### **ENVIRONMENTAL SPECIFICATIONS**

Operating Temperature	-20°C to 50°C (-4°F to 122°F)
Recommended Temperature	0°C to 30°C (32°F to 86°F)
Operating Humidity (RH)	Up to 100%, condensing
Storage Conditions	-20°C to 30°C (-4°F to 86°F) Up to 95% RH, non-condensing State of Energy (SoE): 25% initial
Maximum Elevation	3000 m (9843 ft)
Environment	Indoor and outdoor rated
Enclosure Type	NEMA 3R
Ingress Rating	IP67 (Battery & Power Electronics) IP56 (Wiring Compartment)
Wet Location Rating	Yes
Noise Level @ 1m	< 40 dBA at 30°C (86°F)

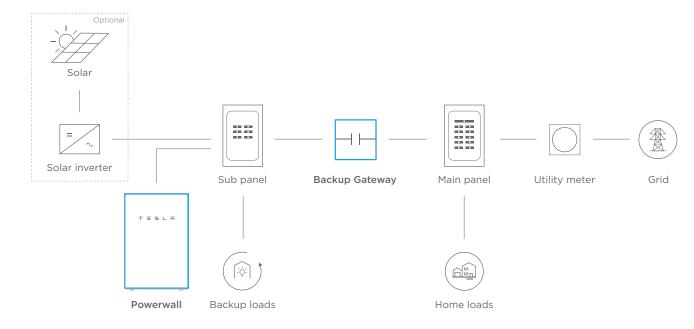
T = 5 L 7

#### TYPICAL SYSTEM LAYOUTS

#### WHOLE HOME BACKUP



#### PARTIAL HOME BACKUP



T = 5 L 7 NA - BACKUP - 2019-06-11 TESLA.COM/ENERGY

<sup>&</sup>lt;sup>2</sup>In Backup mode, grid charge power is limited to 3.3 kW.

<sup>&</sup>lt;sup>3</sup>AC to battery to AC, at beginning of life.