

# SolarEdge Single Phase StorEdge™ Solutions for North America



## **SolarEdge StorEdge™ Solutions Benefits:**

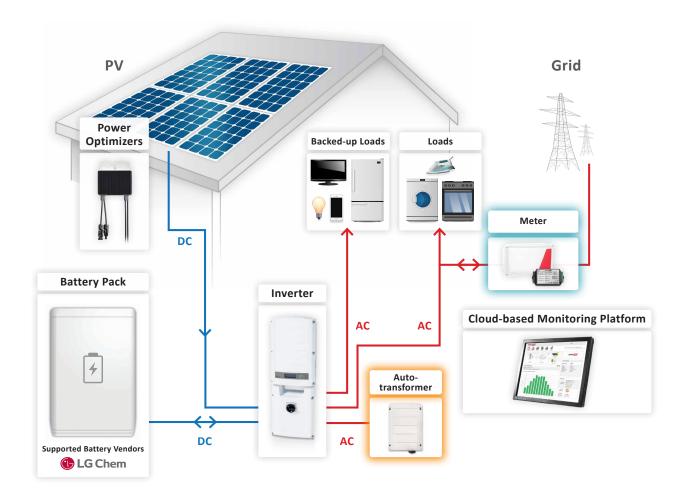
- More Energy DC-coupled architecture stores PV power directly to the battery without AC conversion losses
- Simple Design & Installation single inverter for PV, battery storage, grid-tied and backup applications
- Enhanced Safety no high voltage during installation, maintenance or firefighting
- Full Visibility monitor battery status, PV production, remaining backup power and self-consumption data



# **Solar**Edge Single Phase StorEdge™ Solutions for North America

### StorEdge™ Features:

- Smart Energy Management export control, time-of-use shifting, maximized self-consumption, demand response and peak shaving capabilities
- Backup power automatically provides power to backed-up loads in the event of grid interruption
- All-in-one solution uses a single DC optimized phase inverter to manage and monitor both PV generation and energy storage
- Compatible with the LG Chem RESU battery.



SolarEdge StorEdge <sup>™</sup> Solutions for North America - Product Selector				
	Grid-tied solar, backup power and smart energy management	Grid-tied solar and backup power	Grid-tied solar and smart energy management	
Single Phase StorEdge™ Inverter	✓	✓	✓	
Auto-transformer	✓	✓		
SolarEdge Electricity Meter	✓		✓	
Battery	✓	✓	✓	



# SolarEdge Single Phase StorEdge Inverter

### for North America SE7600A-US(1)

- Single inverter for PV, grid-tied storage and backup power
- Includes the hardware required to provide automatic backup power to backed-up loads in case of grid interruption
- Includes all interfaces needed for battery connection
- UL1741 SA certified, for CPUC Rule 21 grid compliance

	Lower Power Output	Higher Power Output	
OUTPUT - AC (LOADS/GRID)			
Rated AC Power Output	7600	)	VA
Max AC Power Output	8350	)	VA
AC Output Voltage Min-Nom-Max (L-L) <sup>(2)</sup>	211-240	-264	Vac
AC Frequency Min-Nom-Max (2)	59.3 - 60	- 60.5	Hz
Maximum Continuous Output Current @240V	32		A
GFDI	1		A
Utility Monitoring, Islanding Protection, Country Configu-	Yes		
rable Thresholds			
Charge Battery from AC (if Allowed)	Yes		
THD	<3		%
Power factor with rated power	>0.99 (configurable; 0.9 le	eading to 0.9 lagging)	
Typical Nighttime Power Consumption	<5		W
OUTPUT - AC (BACKUP POWER)(3)			
Rated AC Power Output	5000	(4)	VA
Max AC Power Output - Surge	6600	(4)	VA
AC Output Voltage Min-Nom-Max (L-L)	211-240	-264	Vac
AC Output Voltage Min-Nom-Max (L-N)	105-120		Vac
AC Frequency Min-Nom-Max	55 - 60		Hz
Maximum Continuous Output Current @240V - Backup Mode	21		Α
Max Continuous Output Current per Phase @120V			A
GFDI			A
AC Circuit Breaker	Yes		
THD Power factor with rated power		) 2 lagging	\%
	0.2 leading to 0	J.Z lagging	
Automatic switchover time	<2		sec
Typical Nighttime Power Consumption	<5		W
INPUT - DC (PV and BATTERY)			
Transformer-less, Ungrounded	Yes		
Max Input Voltage	500		Vdc
Nom DC Input Voltage	400		Vdc
Reverse-Polarity Protection	Yes		
Ground-Fault Isolation Detection	600kΩ Sen	sitivity	
Maximum Inverter Efficiency	98		%
CEC Weighted Efficiency	97.5		%
INPUT - DC (PV)			
Maximum DC Power (STC)	1025	0	W
Max Input Current (5)	23		Adc
2-pole Disconnection	Yes		
INPUT - DC (BATTERY)			
Supported Battery Types	LG Chem RE	SU10H	
Number of Batteries per Inverter	1 <sup>(6)</sup>		
Continuous Power	3300	5000	W
Peak Power	5000	7000	W
Max Input Current	8.5	17.5	Adc
2-pole Disconnection	Yes		
DC Fuses on Plus and Minus	12A (field replaceable)	25A (field replaceable)	
ADDITIONAL FEATURES	zzn (neid replaceable)	25/ (field replaceable)	
Supported Communication Interfaces	RS485 for battery, RS485, Ethern	et Cellular 7igRee (ontional)	
Battery Power Supply	Yes, 12V		
Revenue Grade Data, ANSI C12.20	Option	#IT 7	
Integrated AC, DC and Communication Connection Unit	Yes		
AC Disconnect	Yes		
Manual Inverter Bypass Switch	Yes		
DC Voltage Rapid Shutdown (PV and Battery)	Yes, according to NEC 2014 and 2017 690.12		
Auto-transformer thermal protection	Yes		

<sup>(1)</sup> These specifications apply to inverters with part numbers SE7600A-USS2XXXXX and connection unit model number BCU-1PH-USS
(2) For other regional settings please contact SolarEdge Support
(3) Not designed for standalone applications and requires AC for commissioning
(4) The rated AC power output is the minimum between the AC Power Output and the battery continuous peak power
(5) A higher current source may be used; the inverter will limit its input current to the values stated
(6) For two LG Chem batteries connection contact SolarEdge
(7) Revenue grade inverter P/N: SE7600A-USS20NHY2

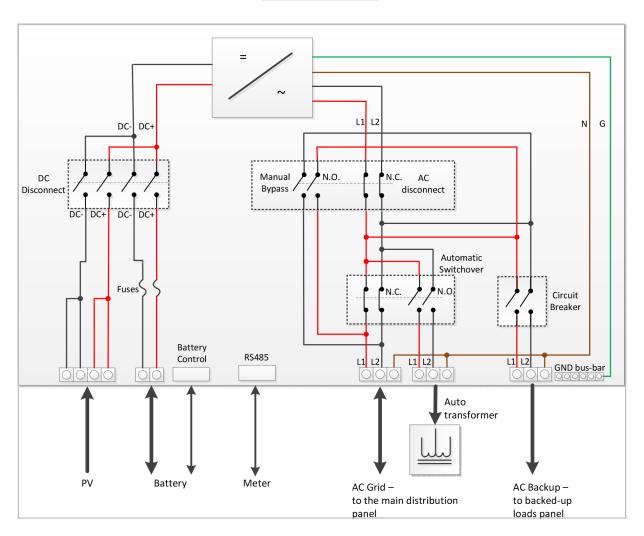


# SolarEdge Single Phase StorEdge Inverter

# for North America SE7600A-US

	Lower Power Output	Higher Power Output	
STANDARD COMPLIANCE			
Safety	UL1741, UL1741 SA, UL1699B, UL1998, UL9540,CSA 22.2		
Grid Connection Standards	IEEE1547, Rule 21, Rule 14H		
Emissions	FCC part15 class B		
INSTALLATION SPECIFICATIONS			
AC Output (Loads/Grid) conduit size / AWG range	1" / 14-6 AWG		
AC Output (Backup) conduit size / AWG range	0.75-1" knockouts / 14-6 AWG		
AC Input (Auto-transformer) conduit size / # of Strings /	0.75-1" / 14-6 AWG		
AWG range			
DC Input (PV) conduit size / AWG range	0.75" / 1-2 Strings 14-8 AWG		
DC Input (Battery) conduit size / AWG range	0.75" / 12-10 AWG		
Dimensions with Connection Unit (HxWxD)	37 x 12.5 x 7.2 / 940 x 315 x 184		in / mm
Weight with Connection Unit	58.5 / 26.5		lb / kg
Cooling	Natural convection and internal fan (user replaceable)		
Noise	<50		dBA
Min - Max Operating Temperature	-13 to +140 / -25 to +60		°F/°C
Protection Rating	NEMA 3R		

#### **Inverter Interface**





SEAUTO-TX-5000

	SEAUTO-TX-5000	
ELECTRICAL RATINGS		,
Rated Power - Continuous	5000	
Rated Power - Peak	7600 for 10sec	VA
Output Voltage	120/240V Split Phase	
Max Continuous Output Current per Phase @120V	25	А
Split Phase Imbalance (@Rated Power)	Yes, up to 25A difference between phases	
Thermal Protection	Yes	
INSTALLATION SPECIFICATIONS		
AC Output conduit size / AWG range	0.75" / 14-6 AWG	
Dimensions (HxWxD)	6.7 x 7.9 x 5.5 / 170 x 200 x 140	in / mm
Weight	29.7 / 13.5	lb / kg
Min - Max Operating Temperature	-13 to +140 / -25 to +60	°F/°C
Protection Rating	NEMA 3R	
Installation	Wall mounted	





# SolarEdge Electricity Meter for North America

For meter specifications refer to: https://www.solaredge.com/sites/default/files/se\_electricity\_meter\_na.pdf



