

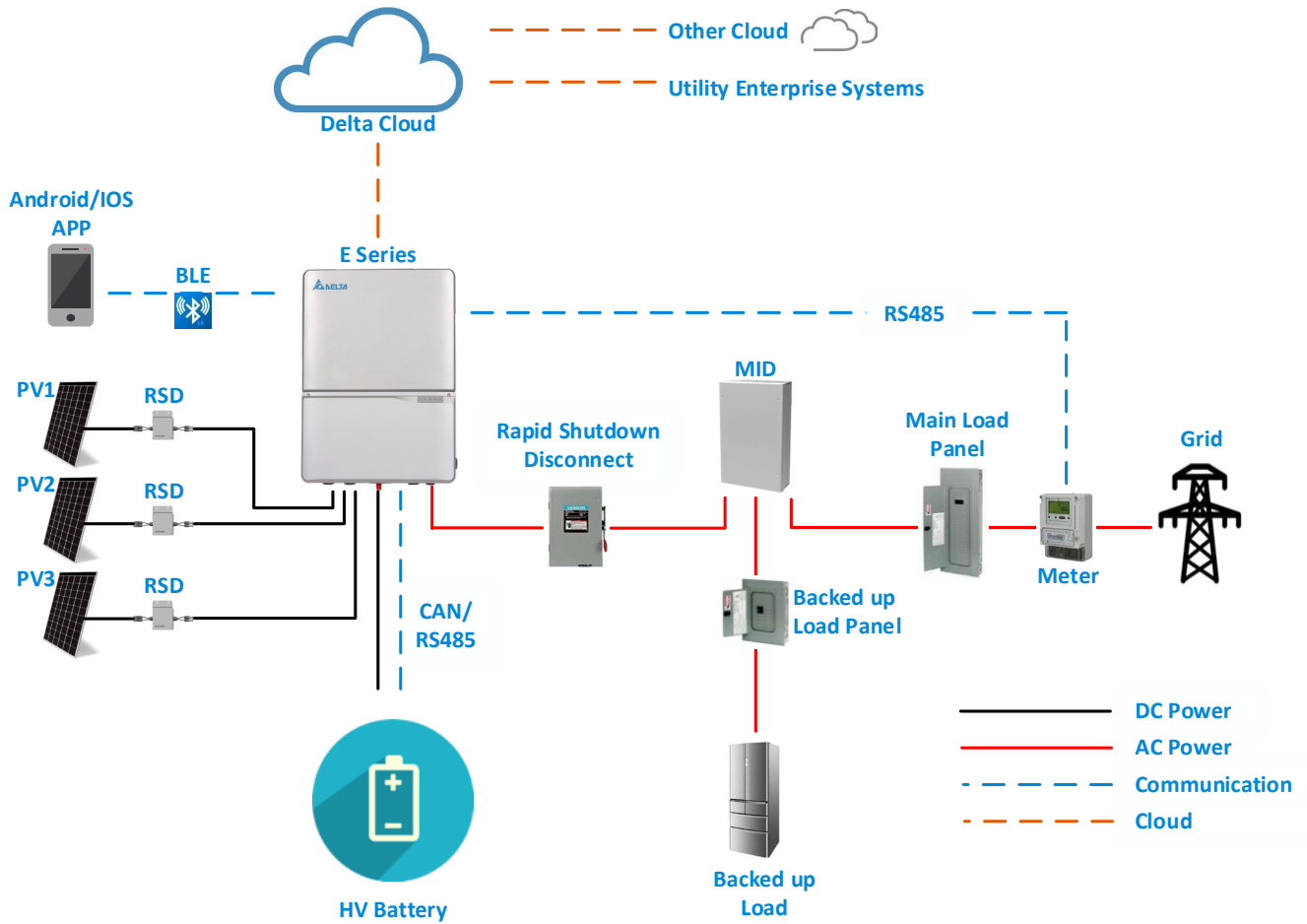
## Residential Energy Storage Solution for North America

E4-TL-US | E6-TL-US | E8-TL-US | E8 Plus-TL-US | E10-TL-US

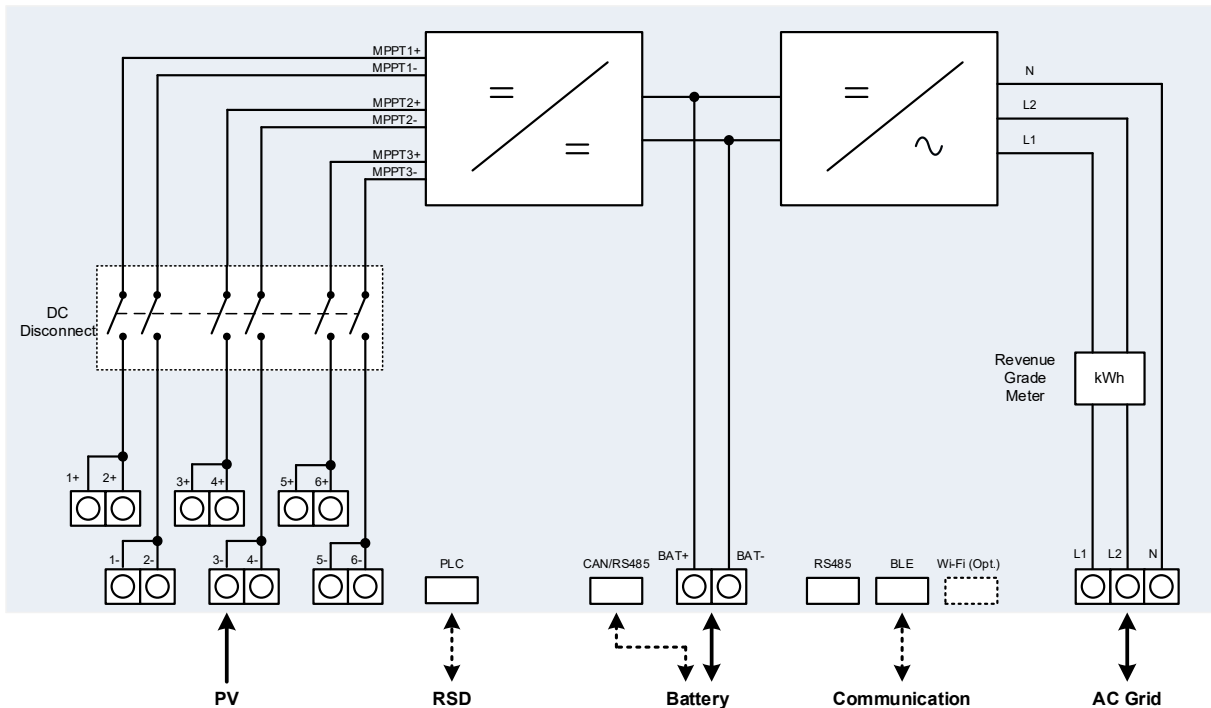


### Key Features:

- UL9540 complied Li-ion battery energy storage system
- Smart inverter with BLE, optional WiFi, Ethernet, 3G / 4G cellular communication
- Optional revenue grade meter (compliant with ANSI C12.20, Class 0.5)
- EMS integrated with self-consumption, zero export, TOU and back-up operations
- Support either DC-coupled or AC-coupled system
- Support bi-directional cloud communication
- Support remote diagnosis and OTA
- Built-in AFCI & Rapid shutdown controller
- UL 1741 SB, HECO compliant
- CA Rule 21 Phase 1 & 2 & 3 compliant



## System Configuration



## Block Diagram



## Residential Energy Storage Solution for North America

Model	E4-TL-US	E6-TL-US	E8-TL-US	E8 Plus-TL-US	E10-TL-US
<b>BATTERY PORT</b>					
Compatible battery pack size	5 kWh to 32 kWh				
Nominal I/O power	5000 W / 7000 W <sup>1)</sup>				
Acceptable input voltage range	350 V to 450 V <sup>2)</sup>				
Nominal I/O current	15 A / 20 A <sup>1)</sup>			30 A / 30 A	
Round trip efficiency (PCS Only)	Peak > 97.5%				
Fuse rating	30 A	30 A	40 A	50 A	50 A
Battery terminal	Screw Type			Spring type	
<b>PV INPUT</b>					
Absolute maximum input voltage	480 V <sup>2)</sup>				
Start-up voltage	120 V				
Operating MPPT voltage range	50 V to 480 V <sup>2)</sup>				
Max. continuous input current per MPPT	12 A	12 A	12 A	12A	12A
Max. module short circuit current per MPPT	15 A	15 A	15 A	15 A	15 A
MPP tracker	3	3	3	4	4
Maximum DC/AC ratio <sup>3)</sup>	1.5				
Maximum allowable MPPT in-paralleled	2 (string)				
MPPT scan (Shading option)	~ 15min (high) / ~ 30min (default) / ~ 60min (low)				
DC disconnect	Integrated				
PV terminal	Spring type				
<b>AC PORT (ON-GRID MODE)</b>					
Nominal output power @ 240Vac	3840 W	5760 W	7680 W	7680 W	9600 W
Maximum output power @ 240Vac	4000 W	6000 W	8000 W	8000 W	10000 W
Nominal output power @ 208Vac	3328 W	4992 W	6656 W	6656 W	8320 W
Maximum output power @ 208Vac	3648 W	5472 W	7296 W	7296 W	9120 W
AC operating voltage range	183 Vac to 228 Vac @ 208 Vac 211 Vac to 264 Vac @ 240 Vac				
Maximum continuous current	16 A	24 A	32 A	32 A	40 A
Operating frequency range	59.3 Hz to 60.5 Hz				
Adjustable frequency range	50 Hz to 66 Hz				
Adjustable power factor range	0.8i to 0.8c				
THD @ nominal power	< 3%				
Grid support compliance	UL 1741 SB, CA Rule 21 phase 1,2, 3, HECO				
Revenue Grade Mete (optional)	Integrated compliant with ANSI C12.20, Class 0.5				
AC terminal	Spring type				
<b>AC PORT (OFF-GRID MODE)</b>					
Output	Pure sin-wave voltage				
Maximum output power	3840 W	5760 W	7680 W	9600 W	9600 W
AC output voltage	240 Vac				
Maximum continuous current	16 A	24 A	32 A	40 A	40 A
Operating frequency range	57 Hz to 63 Hz				
THD @ nominal power	< 5%				
Maximum allowed crest factor	2.0				
AC terminal <sup>4)</sup>	Spring type				

Model	E4-TL-US	E6-TL-US	E8-TL-US	E8 Plus-TL-US	E10-TL-US
<b>GENERAL SPECIFICATION</b>					
Peak efficiency	98.0%				
CEC efficiency	97.5 % @ 240	97.5 % @ 240	97.5 % @ 240	97.5 % @ 240	97.5 % @ 240
Operating temperature range	-22 °F to 149 °F (-30 °C to 65 °C)				
Humidity	0% to 95%				
Maximum operating altitude	9,843 ft (3,000 m)				
Audible noise	< 45 dB(A) @ 3 ft (1 m)				
<b>MECHANICAL DESIGN</b>					
Dimensions (W x H x D)	16.7 x 23.2 x 5.9 in (425 x 590 x 150 mm)				
Weight <sup>5)</sup>	44.8 lbs (20.3 kg)	44.8 lbs (20.3 kg)	45.7 lbs (20.7 kg)	47.6 lbs (21.6 kg)	47.6 lbs (21.6 kg)
Cooling	Natural convection				
Enclosure material	Die-casting aluminum				
<b>INTERFACE</b>					
Display	LED indicators				
Communication interface	BLE, optional WiFi, Ethernet, 3G / 4G cellular communication				
Protocol	Modbus - RTU				
Ethernet (optional)	Standard (support IPv4)				
Remote diagnose/monitoring	Bi-direction via cloud				
Remote firmware update	Via cloud (optional)				
<b>STANDARDS</b>					
Battery safety	UL 1973 / UL 1974 (Optional depends on battery pack)				
Enclosure protecting rating	Type 4				
Safety	UL 1741, CSA - C22.2 No. 107.1-16				
Software approval	UL 1998				
Grounding fault protection	UL 1741 CRD				
Anti-islanding protection	IEEE 1547-2018, IEEE 1547.1-2020				
EMC	FCC part 15 Class B				
AFCI	UL 1699B (Type 1), NEC 2020 690.11				
Rapid shutdown protection	NEC 2020 690.12 <sup>6)</sup>				
Rapid shutdown transmitter	Optional pre-installed <sup>7)</sup>				
Grid support regulation	UL 1741 SB, California Rule 21 phase 1 & 2 & 3, HECO Compliant				
Energy storage system certification	UL 9540				
<b>WARRANTY</b>					
Standard warranty	10 years				

- 1) Adjustable value, limited by the output capability of battery pack
- 2) Adjustable value, limited by the maximum allowed voltage of battery pack
- 3) Please refer to technical note for detailed string configuration
- 4) On-grid mode and off-grid mode are using the same AC port terminal.
- 5) Without weight of revenue grade meter
- 6) Compliant with APS rapid shutdown system or Tigo rapid shutdown system
- 7) Optional pre-installed with APS rapid shutdown transmitter or Tigo rapid shutdown transmitter



## Delta Electronics (Americas), Ltd.

46101 Fremont Blvd, Fremont, CA 94538  
 Sales Email: Inverter.Sales@deltaww.com  
 Support Email: Inverter.Support@deltaww.com  
 Sales Hotline: +1-877-440-5851 or +1-626-369-8021  
 Support Hotline: +1-877-442-4832  
 Support (Intl.): +1-626-369-8019  
 Monday to Friday from 6am to 6pm PST (apart from Holidays)  
 www.Delta-Americas.com



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