

## MEGAPACK 2 XL DATASHEET

TESLA.COM/MEGAPACK

### Grid transformation for the world's largest energy projects

- Best-in-class energy density and round-trip efficiency
- Industry-leading power electronics and thermal system performance
- Rapid and cost-effective deployment with factory-assembled and pre-tested solution

### Scaled and rigorously tested product safety and reliability

- Comprehensive in-house reliability testing by the leading experts in the industry
- Engineered for safety and performance at every level
- Continuous improvement based on large-scale operational experience

### Designed with flexibility and configurability in mind

- Modular architecture that allows for a range of configurations across multiple applications and industry-first Archetypes
- Industry experts available to identify site-specific needs
- Integrated solution that allows for battery augmentation over time



## POWER AND ENERGY

Megapack is configurable. Standard configurations are 2-Hour cell option C010 or C011, 4-Hour cell option C010 or C011, and 4-Hour cell option C012. Nominal energy is specified at 25°C (77°F).

	AC Power per Megapack	Energy per Megapack
2-Hour C010 / C011	1927 kW	3854 kWh
4-Hour C010 / C011	979 kW	3916 kWh
4-Hour C012	1042 kW	4170 kWh

## ELECTRICAL

Nominal AC Voltage	480 V AC 3-phase	
Nominal Frequency	50 or 60 Hz	
Inverter Power per Megapack <sup>1</sup>	2-Hour Max - C010 / C011:	2400 kVA
	4-Hour Max - C010 / C011:	1320 kVA
	4-Hour Max - C012:	1320 kVA
Round-Trip Efficiency <sup>2</sup>	2-Hour - C010 / C011:	91.7%
	4-Hour - C010 / C011:	93.7%
	4-Hour - C012:	91.8%

<sup>1</sup> Scalable from 400 kVA minimum in increments of 50 kVA

<sup>2</sup> Full-depth cycle including all power conversion and thermal system losses, at 25°C (77°F)

## WARRANTY

Coverage	All-inclusive, equipment and energy retention
Term	15 years standard, extendable to 20 years

## PART NUMBER

1848844-XX-Y Where X is a number between 0-9 and Y is a letter

## MECHANICAL AND MOUNTING

Ingress Ratings	IP66 / NEMA 3R (Main Enclosure) IP20 (Thermal System)	
Enclosure Dimensions +/- 13 mm (½ in)	Width:	8800 mm (346 ½ in)
	Depth:	1650 mm (65 in)
	Height:	2785 mm (110 in)
Maximum Weight	38,100 kg (84,000 lb)	
Operating Ambient Temperature	-30°C to 50°C (-22°F to 122°F)	

## REGULATORY

System is designed to be compliant to grid codes and safety standards of all major markets.

System	NRTL listed to UL 1973, UL 9540, UL 9540A, UL 1741 SB, IEC 62619, IEEE 1547
Cells	NRTL listed to UL 1642

## CONTROLS AND COMMUNICATIONS

Protocols	Modbus TCP / DNP3
-----------	-------------------

### Archetypes

Available for both Utility-Scale and Commercial and Industrial (C&I) projects, Archetypes provide advanced control functions and unique design requirements based on the project's electrical topology:

- Utility Battery Only
- Utility Co-Located Plant (Battery Only)
- Utility Hybrid
- C&I Battery Dispatch Only
- C&I Grid-Connected Only
- C&I Backup
- C&I Off-Grid Microgrid
- C&I Grid-Connected Microgrid

### **General Purpose Dry-Type Transformer**

New 180 kVA 3-Ph Dry-Type Grounding Transformer

Primary Voltage: 480 Y 277

Secondary Voltage: 480 D

Fault Duration: 5s

Continuous Neutral Current: 649.52A

Fault Withstand Current: 7720A

Z0 (Zero Sequence Impedance): 0.059Ohms/phase (+/-10% std. tol.)

X/R Ratio:  $\geq 4$

Conductor: Copper

Frequency: 60 Hz

Temperature Rise: 150°C

Insulation Class: 220°C

Cooling Class: ANN

Approvals: UL Listed, CSA Certified, Standard Efficiency

Enclosure: Outdoor NEMA 3R Enhanced



### **ES Reactor**

3PH 480V 3000A 0.022mH ES Reactor CU

System Voltage: 480

Conductor: Copper

Frequency: 60 Hz

Temperature Rise: 150°C

Insulation Class: 220°C

Cooling Class: ANN

Enclosure: Outdoor NEMA 3R