

Customer: SDTV  
Application: 24S1P EV

**Performance Data**

**Individual Battery**

**Single Module Parameters**

**U27-12XP**

Module Capacity at 20Hr. Rate	Ah	138.0
Module Capacity at 5Hr. Rate	Ah	138.0
Module Energy at 5Hr. Rate	Wh	1766
Module Nominal Voltage	V	12.8
Module Charge Voltage(recommended)	V	14.6
Module Charge Voltage(min)	V	13.8
Module Discharge Cutoff	V	10.0
Module Discharge Current Max Continuous	Amps	150.0
Module Discharge Current Max Peak (30 seconds)	Amps	300.0
Module Length	mm	306
Module Width	mm	173
Module Height	mm	225
Module Weight	kg	19.5
Module Energy Density*	Wh/L	148
Module Specific Energy*	Wh/kg	91
Module Impedance	mΩ	5

**Total System Parameters**

Modules in Series		<b>24s</b>
Modules in Parallel		<b>1p</b>
Total Number of Modules		24
System Discharge Voltage	V	307.2
System Charge Voltage(max)^	V	350.4
System Charge Voltage(min)^	V	331.2
System Discharge Cutoff - Minimum	V	240.0
Total Battery System Wt.	kg	468
Total Battery System Vol.	L	286
System Discharge Current Max Continuous†	Amps	150
System Discharge Current Max Peak (30 seconds)†	Amps	300
Total Battery System Capacity*	Ah	138
Total System Energy*	kWh	42.4
Discharge Profile†	% DOD	<b>100%</b>
Utilized Battery System Capacity†	Ah	138
Utilized Battery System Energy†	kWh	<b>42.4</b>

**Recommended Controller Interface**

Model	Quantity
U-BMS-XP-HV, XP series BMU; 100-450V	1

<sup>^</sup> These voltages are for guidance only please contact a Valence technical representative for more details

<sup>\*</sup> Energy calculations use 5 Hr. Rate Capacities, i.e. C/5

<sup>†</sup> Shallow discharges and low current discharges will increase cycle life