



Battery System

# UniPower L

Data sheet

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### General System Information

Identifier/ Name	<b>UniPower L</b>	<b>UniPower L</b>	<b>UniPower L+</b>
Version	<b>24V</b>	<b>48V</b>	<b>48V</b>

### Electrical data

Cell size	18650	18650	18650
Nominal cell voltage	3,6 V	3,6 V	3,6 V
Nominal cell capacity	3,2 Ah	3,2 Ah	3,35 Ah
Serial - Config	7	14	14
Parallel - Config	24	12	12
Nominal voltage	25,2 V	50,4 V	50,4 V
Nominal capacity	76,8 Ah	38,4 Ah	40,2 Ah
Nominal energy	1.935 Wh	1.935 Wh	2.026 Wh

### Charging (without CAN)

End of charge voltage	29,4 V	58,8 V	58,8 V
Recommended charge current	8 A	8 A	8 A
Max. charge current	15 A	15 A	15 A
Charge temperature range	0-45 °C	0-45 °C	0-45 °C

### Discharging

End of discharge voltage	21 V	42 V	42 V
Recommended discharge current	40 A	40 A	40 A
Max. discharge current	50 A	50 A	50 A
Discharge temperature range	-20-60 °C	-20-60 °C	-20-60 °C

### Mechanical data

Length	265 mm	265 mm	265 mm
Width	75 mm	75 mm	75 mm
Height	377 mm	377 mm	377 mm
Weight	11,5 kg	11,5 kg	11,8 kg
IP class	65	65	65

### Energy density

volumetric energy density	258 Wh/l	258 Wh/l	270 Wh/l
gravimetric energy density	168 Wh/kg	168 Wh/kg	172 Wh/kg

### Application

System Voltage	24 V	48 V	48 V
Communication	CAN	CAN	CAN
Connector type	Weipu	Weipu	Amphenol
Connector pins	2 Power 6 Signal	2 Power 6 Signal	2 Power 5 Signal

### Storage

Recommended temperature range	0-25 °C	0-25 °C	0-25 °C
Recommended state of charge	30-70 %	30-70 %	30-70 %

### BMS Functionality

Undervoltage protection	Implemented	Implemented	Implemented
Overvoltage protection	Implemented	Implemented	Implemented
Short circuit protection	Implemented	Implemented	Implemented
Cell balancing	Implemented	Implemented	Implemented
Low energy standby	Implemented	Implemented	Implemented

### Standards/ Approval

Transport Test		UN 38.3	UN 38.3
RoHS	compliant	compliant	compliant