



Battery System

# UniPower S

Data sheet

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### General System Information

Identifier/ Name	<b>UniPower S</b>	<b>UniPower S</b>	<b>UniPower S</b>
Version	<b>24V</b>	<b>36V</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	2,8 Ah	3,35 Ah	2,85 Ah
Serial - Config	7	10	14
Parallel - Config	12	8	6
Nominal voltage	25,2 V	36 V	50,4 V
Nominal capacity	31.2 Ah	26,8 Ah	17,1 Ah
Nominal energy	786 Wh	965 Wh	862 Wh

### Charging (without CAN)

End of charge voltage	28,7 V	42 V	58,8 V
Recommended charge current	8 A	6 A	5 A
Max. charge current	25 A	8 A	8 A
Charge temperature range	0-45 °C	0-45 °C	0-45 °C

### Discharging

End of discharge voltage	21 V	30 V	42 V
Recommended discharge current	20 A		
Max. discharge current	40 A	25 A	30 A
Discharge temperature range	-20-60 °C	-20-60 °C	-20-60 °C

### Mechanical data

Length	308 mm	308 mm	308 mm
Width	80 mm	80 mm	80 mm
Height	215 mm	215 mm	215 mm
Weight	6,3 kg	6 kg	6,1 kg
IP class	54	65	54

### Energy density

volumetric energy density	148 Wh/l	182 Wh/l	163 Wh/l
gravimetric energy density	125 Wh/kg	161 Wh/kg	141 Wh/kg

### Application

System Voltage	24 V	36 V	48 V
Communication	CAN	CAN	CAN
Connector type	Higo	Chogori	Chogori
Connector pins	2 Power 6 Signal	2 Power 6 Signal	2 Power 6 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	UN 38.3
IEC	62133		
RoHS	compliant	compliant	compliant