



smart battery solutions



Battery System

UniPower M

Data sheet

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General System Information

Identifier/ Name	UniPower M	UniPower M	UniPower M
Version	24V	36V	48V

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	3,35 Ah
Serial - Config	7	10	14
Parallel - Config	20	10	10
Nominal voltage	25,2 V	36 V	50,4 V
Nominal capacity	56 Ah	33,5 Ah	33,5 Ah
Nominal energy	1.411 Wh	1.206 Wh	1.688 Wh

Charging (without CAN)

End of charge voltage	29,4 V	42 V	58,8 V
Recommended charge current	8 A	8 A	8 A
Max. charge current	25 A	15 A	15 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	30 A		
Max. discharge current	40 A	60 A	60 A
Discharge temperature range	-20-60 °C	-20-60 °C	-20-60 °C

Mechanical data

Length	228 mm	228 mm	228 mm
Width	75 mm	75 mm	75 mm
Height	377 mm	377 mm	377 mm
Weight	8,9 kg	7,2 kg	9,2 kg
IP class	54	65	65

Energy density

volumetric energy density	219 Wh/l	187 Wh/l	262 Wh/l
gravimetric energy density	159 Wh/kg	168 Wh/kg	184 Wh/kg

Application

System Voltage	24 V	36 V	48 V
Communication	CAN	CAN	CAN
Connector type	Higo S828B	Smart Connector	Smart Connector
Connector pins	2 Power 8 Signal	2 Power 10 Signal	2 Power 10 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
IEC	62133, 62619		
UN ECE			R 136
RoHS	compliant	compliant	compliant

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