

## ➤ Technical Specifications

Control Module	
<b>Operating Condition</b>	
Operating Temperature	0-50°C ( 32-122°F )
Storage Temperature	-10-70°C ( 14-158°F)
Relative Humidity Ratio	5% - 90% RH
Atmospheric Pressure	80 - 110 kPa
Power Input	12VDC @1.5A
Max. Power Consumption	20 Watt
<b>Communication Interface</b>	
RS-485	Modbus RTU
Ethernet	SNMP
<b>Features</b>	
Number of String	4 Strings can be monitored
Number of String Module	1 String Module at each String
Number of Battery Module	120 Battery Module at string, 480 Battery Modules in total
Battery Nominal Voltage	1,2V - 12V Batteries
String Voltage	1,2V - 2500VDC
<b>Input/ Output</b>	
Relay Output	2 x Dry Contact Output, 400V (AC-DC) 120mA (optionally digital)
Digital Input	2 x 12-24VDC
Electrical Isolation	2000 V
<b>Physical Characteristics</b>	
Dimensions ( H x W x D )	40,5 x 200 x 95,5 x mm
Enclosure	Metal
Color	Grey

String Module	
<b>Current Monitoring</b>	
Current Range	0-500A
Resolution	10 mA
Accuracy	1%
Current Sensor	Hall Effect Sensor
<b>Ambient Temperature Monitoring</b>	
Temperature Range	0-50°C ( 32-122°F )
Resolution	0.1°C
Accuracy	±2 °C
<b>String Voltage Monitoring</b>	
Voltage Range	1-2500 VDC
Resolution	10 mV
Accuracy	0.1%
<b>Humidity Monitoring</b>	
Resolution	1% RH
Accuracy	5%
<b>Protection</b>	
Isolation	2000 V Opto Isolation
Short Circuit Protection	Max. 3.5A (Internal Fuse)
<b>Operating Conditions</b>	
Operating Temperature	0-50°C ( 32-122°F )
Storage Temperature	-10-70°C ( 14-158°F )
Relative Humidity Ratio	5%-90% RH
Atmospheric Pressure	80-110kPa
<b>Power</b>	
Power Consumption	1.2 Watt
<b>Operating Current</b>	
Nominal Operation	100 mA
<b>Communication</b>	
Data Transmission Interface	Serial Modbus Protocol
<b>Physical Characteristics</b>	
Dimensions ( H x W x D )	( 91 x 63 x 29 mm )
Enclosure	ABS
Color	Semi-Transparent Grey

Battery Module	
<b>Compatibility</b>	
Battery Type	VRLA, VLA, Ni-Cd
<b>Battery Voltage Monitoring</b>	
Voltage Range	1-16V
Resolution	1 mV
Accuracy	0.05 % ± 6 mV
<b>Internal Resistance Monitoring</b>	
Resistance Range	0.1 - 64m ohms
Resolution	1µOhm
Accuracy	±2 %
<b>Temperature Monitoring</b>	
Temperature Range	0-50°C ( 32-122°F )
Resolution	0.1°C
Accuracy	±2 °C
<b>Protection</b>	
Isolation	2000 V Opto Isolation
Short Circuit Protection	Max. 3.5A (Internal Fuse)
Reverse Polarity Protection	Provides protection at rated voltage against reverse connection
<b>Operating Conditions</b>	
Operating Temperature	0-50°C ( 32-122°F )
Storage Temperature	-10-70°C ( 14-158°F )
Relative Humidity Ratio	5%-90% RH
Atmospheric Pressure	80-110kPa
<b>Power</b>	
Power Consumption	50mA @2V Battery 10mA @12V Battery
<b>Operating Current</b>	
Nominal Operation	10mA - 50mA
Internal Resistance Measurement During Test	0.167 A/dk
Low power mode	<2 mA
<b>Communication</b>	
Data Transmission Interface	Serial Modbus Protocol
<b>Features</b>	
Auto Addressing	Automatically obtain address during installation or replacement
Voltage Balancing Accuracy (optional)	Voltage balancing feature on string ±0.05 V
<b>Physical Characteristics</b>	
Dimensions ( H x W x D )	( 91 x 63 x 29 mm )
Enclosure	ABS
Color	Semi-Transparent Grey

Alpais Software
<b>Minimum system requirements (if it's not Embedded Server)</b>
<ul style="list-style-type: none"> <li>❖ Core speed of 1.3 GHz or faster</li> <li>❖ Min 2 core CPU</li> <li>❖ Min 4 GB RAM</li> <li>❖ Min 25 GB of free hard disk space</li> </ul>

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