

MODBUS Protocol

1 Communications interface

Communicates over a RS485 port on the converter. The port on the CELLCHECK module is a UART port which can not be communicated with a device directly.

2 Bits per Byte

All Used in RTU mode, the default Bits per Byte listed as followed.

START	1	2	3	4	5	6	7	8	STOP
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3 Communication rate

The default is 9600BPS.

4 Data Format

All values with two bytes, the highest bit indicates sign if it's a temperature.(0 for positive and 1 for negative)

Category	Conversion method	Unit
Cell Voltages	/1000	V
Cell Resistance	/1	$\mu\Omega$
Temperature	/10	$^{\circ}\text{C}$

5 Address

Each module with a address which can be set in the register 400015.

Register Map

Category	Name	Reference	Data Address	Default Value	Remarks
Firmware	Firmware Version	400001	0000H	40A0H	
Data	Cell Voltage	400002	0001H	-	
	Cell Temperture	400003	0002H	-	
	-----	400004	0003H	-	
Commands	Reset	400012	000BH	0	Sets the value to 0xF0F0, the module will perform a reset.
	-----	400013	000CH	-	
	-----	400014	000DH	-	
Parameters	Module Address	400015	000EH	1	The default address is 1.
	-----	400016	000FH		
	-----	400017	0010H		
	-----	400018	0011H		
	Module Type	400019	0012H	2	2: 2V, 6: 6V,12: 12V
	-----	400020	0013H	-	
	-----	400021	0014H	-	
	Baut Rate	400022	0015H	96	The default value is 9600BPS.
	-----	400023	0016H	3	
	-----	400024	0017H	-	
	-----	400025	0018H	-	
	-----	400026	0019H	-	
	-----	400027	001AH	-	
	-----	400028	001BH	1	
	LED Control	400029	001CH	0	sets the value to 1, the blue LED will be on for 1 second and off for 1 second.
		400030	001DH	-	