



Modbus

MyBox Home

Description

Baudrate is 9600bps 8N1 (8bit, no parity bit, one stop bit).

All registers are 16 bit unsigned integers.

Address depends on the Load Balancing configuration:

Load Balancing	Modbus Address
Disabled/Master	0x01
Node 1	0x02
Node 2	0x03
Node 3	0x04
Node 4	0x05
Node 5	0x06
Node 6	0x07
Node 7	0x08

Broadcast to all SmartEVSE with address 0x09.

Register 0x00*: EVSE status

Register	Access	Description	Unit	Values
0x0000	R/W	State		A-D (EVSE State), E-H (A-D Waiting for Balance Master)
0x0001	R/W	Error	Bit	1:LESS_6A / 2:NO_COMM / 4:TEMP_HIGH / 8:Unused / 16:RCD / 32:NO_SUN
0x0002	R/W	Charging current	0.1 A	0:no current available / 6-80
0x0003	R/W	EVSE mode (without saving)		0:Normal / 1:Smart / 2:Solar
0x0004	R/W	Solar Timer	s	
0x0005	R/W	Access bit		0:No Access / 1:Access
0x0006	R/W	Configuration changed (Not implemented)		
0x0007	R	Maximum charging current	A	
0x0008	R	Number of used phases (Not implemented)		0:Undetected / 1 - 3
0x0009	R	Real charging current (Not implemented)	0.1 A	
0x000A	R	Temperature	K	
0x000B	R	Serial number		
0x0020 - 0x0027	W	Broadcast charge current. SmartEVSE uses only one value depending on the "Load Balancing" configuration	0.1 A	0:no current available

Register 0x01*: Node specific configuration

Register	Access	Description	Unit	Values
0x0100	R/W	Configuration		0:Socket / 1:Fixed Cable
0x0101	R/W	Cable lock		0:Disable / 1:Solenoid / 2:Motor
0x0102	R/W	MIN Charge Current the EV will accept	A	6 - 16
0x0103	R/W	MAX Charge Current for this EVSE	A	6 - 80
0x0104	R/W	Load Balance		0:Disabled / 1:Master / 2-8:Node
0x0105	R/W	External Switch on pin SW		0:Disabled / 1:Access Push-Button / 2:Access Switch / 3:Smart-Solar Push-Button / 4:Smart-Solar Switch
0x0106	R/W	Residual Current Monitor on pin RCM		0:Disabled / 1:Enabled
0x0107	R/W	Use RFID reader		0:Disabled / 1:Enabled
0x0108	R/W	Type of EV electric meter		*
0x0109	R/W	Address of EV electric meter		10 - 247

Register 0x02*: System configuration

Register	Access	Description	Unit	Values
0x0200	R/W	EVSE mode		0:Normal / 1:Smart / 2:Solar
0x0201	R/W	EVSE Circuit max Current	A	10 - 160
0x0202	R/W	Grid type to which the Sensorbox is connected		0:4Wire / 1:3Wire
0x0203	R/W	CT calibration value	0.01	Multiplier
0x0204	R/W	Max Mains Current	A	10 - 200
0x0205	R/W	Surplus energy start Current	A	1 - 16
0x0206	R/W	Stop solar charging at 6A after this time	min	0:Disable / 1 - 60
0x0207	R/W	Allow grid power when solar charging	A	0 - 6
0x0208	R/W	Type of Mains electric meter		*
0x0209	R/W	Address of Mains electric meter		10 - 247
0x020A	R/W	What does Mains electric meter measure		0:Mains (Home+EVSE+PV) / 1:Home+EVSE
0x020B	R/W	Type of PV electric meter		*
0x020C	R/W	Address of PV electric meter		10 - 247
0x020D	R/W	Byte order of custom electric meter		0:LBF & LWF / 1:LBF & HWF / 2:HBF & LWF / 3:HBF & HWF
0x020E	R/W	Data type of custom electric meter		0:Integer / 1:Double
0x020F	R/W	Modbus Function (3/4) of custom electric meter		

0x0210	R/W	Register for Voltage (V) of custom electric meter		0 - 65530
0x0211	R/W	Divisor for Voltage (V) of custom electric meter	10 ^x	0 - 7
0x0212	R/W	Register for Current (A) of custom electric meter		0 - 65530
0x0213	R/W	Divisor for Current (A) of custom electric meter	10 ^x	0 - 7
0x0214	R/W	Register for Power (W) of custom electric meter		0 - 65534
0x0215	R/W	Divisor for Power (W) of custom electric meter	10 ^x	0 - 7 /
0x0216	R/W	Register for Energy (kWh) of custom electric meter		0 - 65534
0x0217	R/W	Divisor for Energy (kWh) of custom electric meter	10 ^x	0 - 7
0x0218	R/W	Maximum register read (Not implemented)		
0x0219	R/W	WiFi mode		
0x021A	R/W	Limit max current draw on MAINS (sum of phases)	A	9:Disable / 10 - 200

- Number in brackets in section "Predefined electric meters"

ELEXIM, a.s.
 Riegrovo náměstí 179/14
 767 01 Kroměříž

info@elexim.net

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