

**Table Modbus Register - Based on the registry implementation of the Ghost platform from eSystems
(from FW version R03.004.045.121-elli)**

Bus-Adr.	R/W	ModBus-Function	Type	Description	Range	Values / examples	Default Value
4	R	04 - readInputRegister	uint16	Modbus Register-Layouts Version	0..65536	0x100 -> V1.0.0	-
5	R	04 - readInputRegister	uint16	Charging State	1...11	2=A1, 3=A2, 4=B1, 5=B2, 6=C1, 7=C2, 8=derating, 9=E, 10=F, 11=ERR	-
6	R	04 - readInputRegister	uint16	L1 - Current RMS	0....350	1 = 0.1 Arms	-
7	R	04 - readInputRegister	uint16	L2 - Current RMS	0....350	1 = 0.1 Arms	-
8	R	04 - readInputRegister	uint16	L3 - Current RMS	0....350	1 = 0.1 Arms	-
9	R	04 - readInputRegister	int16	PCB-Temperatur in 0.1 °C	-200°C/200°C	325 = +32.5 °C / -145 = -14.5 °C	-
10	R	04 - readInputRegister	uint16	Voltage L1 - N rms in Volt	0...65536	238 = 238 Vrms	-
11	R	04 - readInputRegister	uint16	Voltage L2 - N rms in Volt	0...65536	8 = 8 Vrms	-
12	R	04 - readInputRegister	uint16	Voltage L3 - N rms in Volt	0...65536	258 = 258 Vrms	-
14	R	04 - readInputRegister	uint16	Power (L1+L2+L3) in VA	0...65536	1000 --> 1kVA	-
15	R	04 - readInputRegister	uint16	Energy since PowerOn [High byte]	0...65536	1 --> 2 ¹⁶ VAh	-
16	R	04 - readInputRegister	uint16	Energy since PowerOn [Low byte]	0...65536	1000 --> 1000VAh	-
17	R	04 - readInputRegister	uint16	Energy since Installation [High byte]	0...65536	1 --> 2 ¹⁶ VAh	-
18	R	04 - readInputRegister	uint16	Energy since Installation [Low byte]	0...65536	1000 --> 1000VAh	-
100 ¹	R	04 - readInputRegister	uint16	Hardware configuration maximal current	0...16	10 = 10A	-
101 ¹	R	04 - readInputRegister	uint16	Hardware configuration minimal current	0...16	7 = 7A	-
257 ²	R / W	03 - readHoldingRegister 06 - writeHoldingRegister	uint16	ModBus-Master WatchDog Timeout in ms	0...65536	10000 = 10 sec. 0 = Off	15000
261 ³	R / W	03 - readHoldingRegister 06 - writeHoldingRegister	uint16	Maximal current command	[0; 60 to 160]	100 = 10A	0
262 ⁴	R / W	03 - readHoldingRegister 06 - writeHoldingRegister	uint16	FailSafe Current configuration (in case loss of Modbus communication)	[0; 60 to 160]	0 = error state 60 = 6 A	0

¹ In order to correctly support the 22kW variants, the value ranges will be extended to [0..32] in a future release.

² The timer only starts after an initial interaction between the client and server (read or write).

³ Contrary to the reference implementation in Amperfiied chargers, the "MaximalCurrentCommand" value can be further reduced by additional internal limit functions. Writing to register 261 sets an active limit. However, internal automatic limit functions or other external EMS control functions can further reduce this limit. A "read" on register 261 always shows the currently valid current limit. The maximum limit value will be increased to 32A for the 22kW variant in the near future.

⁴ The value 0 for Error State is not supported. In the future, maximum values of 32A == 320 will be supported here in order to also support the 22kW variant.