

ECH8 Modbus Register Map

Input Registers		Data type	Description	Data	Values
1	Operating mode	unsigned int	Operating mode	0-6	0 = Auto mode 1 = OFF 2 = Manual mode 20% 3 = Manual mode 40% 4 = Manual mode 60% 5 = Manual mode 80% 6 = Manual mode 100%
2	Temperature probe state	unsigned int	Temperature Probe Status	0-2	0 = Connected 1 = Not connected or temperature is greater than working range 2 = Short circuit or temperature is less than working range
3	Set temperature	unsigned int	Potentiometer Temperature	50-350	50 = 5,0 °C 350 = 35,0 °C
4	Actual temperature	unsigned int	Temperature Probe Temperature	0-400	0 = 0 °C 400 = 40,0 °C
5	Unregulated output	unsigned int	Unregulated Output Status	0-1	0 = Off 1 = On
6	Analogue output mode	unsigned int	Analog Output Mode	0-1	0 = 0-10 VDC 1 = 0-6 VDC
7	Analogue output	unsigned int	Analog Output	0-100	0% - 100%
8	Device mode	unsigned int	Cooling or Heating Mode	0-1	0 = Cooling 1 = Heating

Holding Registers		Data type	Description	Data	Values
1	Device slave address	unsigned int	Modbus device address	1 - 247 default: 1	
2	Modbus baud rate	unsigned int	Modbus communication baud rate	0 - 6 default: 2	0 = 4.800 1 = 9.600 2 = 19.200 3 = 38.400 4 = 57.600 5 = 115.200 6 = 230.400
3	Modbus parity	unsigned int	Parity check mode	0 - 2 default: 1	0 = 8N1 1 = 8E1 2 = 8O1
4	Device type	unsigned int	Device type. <i>Read only</i>	ECH8 = 2117	
5	HW version	unsigned int	Hardware version of the device. <i>Read only</i>	XXXX	0x0100 = HW version 1.0
6	FW version	unsigned int	Firmware version of the device. <i>Read only</i>	XXXX	0x0100 = FW version 1.0
7			Reserved, returns 0		
8			Reserved, returns 0		
9	Modbus resistor termination (NRT)	unsigned int	Modbus termination resistor connection	0 - 1 default: 0	0 = NBT disconnected 1 = NBT connected
10	Modbus registers reset	unsigned int	Resets Modbus holding registers to default values. When finished this register is automatically reset to '0'	0 - 1 default: 0	0 = Idle 1 = Reset Modbus Registers
11	Remote mode	unsigned int	Remote Mode Status	0-1 default: 0	0 = Off 1 = On - next 3 registers are allowed
13	Unregulated output overwrite	unsigned int	Direct inregulated output driving (allowed in remote mode only)	0-1 default: 0	0 = Off 1 = On - next 3 registers are allowed
14	Analogue output mode	unsigned int	Remote analogue output mode control (allowed in remote mode only)	0-1 default: 0	0 = 0-6VDC 1 = 0-10VDC
15	Analogue output overwrite	unsigned int	Direct analogue output driving (allowed in remote mode only)	0-100 default: 0	0% - 100%