

SIGWM | WI-FI SENTERA INTERNET GATEWAY

Modbus register map



MODBUS REGISTER MAP

HOLDING REGISTERS						
		Data type		Raw data range	Values	Factory default values
1	Device address	unsigned integer	Modbus device address	1–247		1
2	Baud Rate	unsigned integer	Modbus communication baud rate	0–6	0 = 4.800 3 = 38.400 1 = 9.600 4 = 57.600 2 = 19.200 5 = 115.200 6 = 230.400	2
3	Parity	unsigned integer	Parity check mode	0–2	0 = 8N1 1 = 8E1 2 = 8O1	1
4	Device type	unsigned integer	Device type. Read only	2.107	SIGWM = 2.107	
5	HW version	unsigned integer	Hardware version of the device. Read only	XXXX	0x0100 = HW version 1.0	
6	FW version	unsigned integer	Firmware version of the device. Read only	XXXX	0x0210 = FW version 2.1	
7	Firmware version (Wi-Fi)	unsigned integer	Firmware version of the Wi-Fi module. Read only	XXXX	0x0210 = FW version 2.1	
8			Reserved, return 0			
9	Modbus Termination Resistor	unsigned integer	Set device as begin or end device of the Modbus (RS485) communication network line. 120Ω resistor over A and /B line	0, 1	0 = NBT disconnected 1 = NBT connected	0
10			Reserved, return 0			

HOLDING REGISTERS						
		Data type		Raw data range	Values	Factory default values
11	Set IP Connection Type	unsigned integer	Wi-Fi. Read only		1 = Wi-Fi	1
12	Set IP Connection mode	unsigned integer	DHCP. Read only		0 = DHCP	0
13	Set IP Address Part 1	unsigned integer	First value of the IP address, only available when Reg. 12 set to 1	0–255	192 = 192	192
14	Set IP Address Part 2	unsigned integer	Second value of the IP address, only available when Reg. 12 set to 1	0–255	168 = 168	168
15	Set IP Address Part 3	unsigned integer	Third value of the IP address, only available when Reg. 12 set to 1	0–255	1 = 1	1
16	Set IP Address Part 4	unsigned integer	Fourth value of the IP address, only available when Reg. 12 set to 1	0–255	100 = 100	123
17	Set Gateway Address Part 1	unsigned integer	First value of the Gateway address, only available when Reg. 12 set to 1	0–255	192 = 192	192
18	Set Gateway Address Part 2	unsigned integer	Second value of the Gateway address, only available when Reg. 12 set to 1	0–255	168 = 168	168
19	Set Gateway Address Part 3	unsigned integer	Third value of the Gateway address, only available when Reg. 12 set to 1	0–255	1 = 1	1
20	Set Gateway Address Part 4	unsigned integer	Fourth value of the Gateway address, only available when Reg. 12 set to 1	0–255	254 = 254	254
21	Subnet Mask 1	unsigned integer	First value of the subnet mask, only available when Reg. 12 set to 1	0–255	255 = 255	255
22	Subnet Mask 2	unsigned integer	Second value of the subnet mask, only available when Reg. 12 set to 1	0–255	255 = 255	255

HOLDING REGISTERS						
		Data type		Raw data range	Values	Factory default values
23	Subnet Mask 3	unsigned integer	Third value of the subnet mask, only available when Reg. 12 set to 1	0–255	255 = 255	255
24	Subnet Mask 4	unsigned integer	Fourth value of the subnet mask, only available when Reg. 12 set to 1	0–255	0 = 0	0
25	DNS Server - Part 1	unsigned integer	First value of the DNS-server, only available when Reg. 12 set to 1	0–255	0 = 0	192
26	DNS Server - Part 2	unsigned integer	Second values of the DNS-server, only available when Reg. 12 set to 1	0–255	0 = 0	168
27	DNS Server - Part 3	unsigned integer	Third value of the DNS-server, only available when Reg. 12 set to 1	0–255	0 = 0	1
28	DNS Server - Part 4	unsigned integer	Fourth value of the DNS server, only available when Reg. 12 set to 1	0–255	0 = 0	1
29	MAC Address - Field 1	unsigned integer	First value of the MAC-address	0–255	200 = 200 (decimal value) and C8 (hexadecimal value)	0
30	MAC Address - Field 2	unsigned integer	Second value of the MAC-address	0–255	100 = 100 (decimal value) and 64 (hexadecimal value)	0
31	MAC Address - Field 3	unsigned integer	Third value of the MAC-address	0–255	32 = 32 (decimal value) and 20 (hexadecimal value)	0
32	MAC Address - Field 4	unsigned integer	Fourth value of the MAC-address	0–255	64 = 64 (decimal value) and 40 (hexadecimal value)	0
33	MAC Address - Field 5	unsigned integer	Fifth value of the MAC-address	0–255	255 = 255 (decimal value) and FF (hexadecimal value)	0

HOLDING REGISTERS

		Data type		Raw data range	Values	Factory default values
34	MAC Address – Field 6	unsigned integer	Sixth value of the MAC-address	0–255	0 = 0 (decimal value) and 00 (hexadecimal value)	0

Note: The holding registers can be managed via the following Modbus commands: “Read Holding Registers”, “Write Single Register” or “Write Multiple Registers”.

The free Sentera configuration and monitoring software 3SModbus can be downloaded via: <https://www.sentera.eu/en/3SMCenter>

HIDDEN REGISTERS						
		Data type		Raw data range	Values	Factory default values
8	Modbus Safety Timeout	unsigned integer	Timeout setting for no Modbus communication	0–60	0 = No timeout 60 = 60 minutes = 1 hour	0
10	Reset Modbus Holding Registers	unsigned integer	Resets Modbus Holding registers (above 10) to default values. When finished this register is automatically reset to '0'	0, 1	0 = Idle 1 = Reset	0
35	MQTT Broker Mode	unsigned integer	Switching between live and testing Broker	0, 1	0 = Live Broker (broker.senteraweb.eu) 1 = Test Broker (testbroker.senteraweb.eu)	0
36	Production Test	unsigned integer	Was gateway tested or not?	0, 1	0 = Not Tested 1 = Tested	0
37	Installer Page	unsigned integer	Indicates if installer page was set	0, 1	0 = Installer page not set -> 'admin' is password 1 = Installer page is set -> new password	0
38	Installation Page	unsigned integer	Indicates if there is active installation	0, 1	0 = Installation not set -> installer page can be accessed 1 = Installation is set -> only possible to configure over SenteraWeb	0
39			Reserved, returns 0			
40	Update Slave Device	unsigned integer	Indicates slave ID of updated article	0–255	0 = No Slave device was updated X = Slave ID for to be updated device (means it was not successfully updated yet, no other device possible to put to bootloader in network)	0
41	Time Zone	unsigned integer	Time zone selected during installation	0–86	Selected time zone (coming from configuration page)	30