



## Modbus Gateway

### *Modbus Serial (RS485) to Modbus TCP*

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#### SMG.100 Features

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- Powered with 120MHz Cortex M4 CPU
- Baud rate from 600 to 230.400 bps
- Data bits 5, 6, 7, 8
- Parity bits None, Odd, Even, Mark, Space
- User-friendly web page for set-up
- Quick-set, fast-reboot
- DIN rail mounting
- Operating voltage 24VDC

## Technical Data

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Electrical	Power Supply	DC 15...35 V
	Power Consumption	< 3 W
Ethernet	Port	1
	Interface	RJ45, 8 Pin
	Rate	10/100 Mbps, Auto-detection
	Receive Buffer	16k bytes
	Protection	2KV electromagnetism isolation
Serial	Port	1
	Protocol	Modbus RS485
	Baudrate	600bps to 230.400bps
	Data bits	5, 6, 7, 8
	Stop bit	1, 2
	Check bit	None, Even, Odd, Space, Mark
	Flow Control	Hardware, RTS/CTS
	Buffer	2k bytes
General	storage temperature	-10...50°C
	operating temperature	-40...70°C
Connections	Power	Pluggable screw terminal
	Modbus RS485	Pluggable screw terminal
	Ethernet	RJ45, 8 Pin
	Mounting	DIN Rail
Dimensions	net	100 x 60 x 36 mm
Weight	net	67 gr
	packed	85 gr

## Terminals, Buttons, Connections

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### Modbus Terminal

A	modbus/rs485, positive pair
B	modbus/rs485, negative pair
MGnd	GND

### Power Terminal

24V	15...35 Vdc
GND	ground for power

### Ethernet Socket

RJ45, 8 Pin

### Reset Button

Press for RESET in case of any freezing  
Gateway will reset in 1 second

### Reload Button

Press for RELOAD in case of missing parameters  
Unit will restore the factory settings  
Gateway will reset in a few second

**SMG.100**

Modbus Gateway - Serial to TCP

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Current Status	parameter	help
Local IP	<b>Module Name: SMG.100</b> Firmware Revision: 3016 Current IP Address: 192.168.1.7 MAC Address: d8-b0-4c-da-fd-52 Run Time: 2day: 21hour: 50min TX Count(ETH) : 1725787/0/0 bytes RX Count(ETH) : 1914972/0/0 bytes Conn Status(ETH)A: CONNECTED( 1)/LISTEN/LISTEN Conn Status(ETH)B: IDLE/IDLE/IDLE	<ul style="list-style-type: none"> <li>• <b>Run time:</b> run time means the minutes since latest reboot</li> <li>• <b>TX/RX Count:</b> TX/RX count give us a calculation of the total byte we have been received or send.</li> </ul>
Modbus		
Config		
Reboot		

Default parameters for login:

User admin

Password admin

You can check the status of unit at this page

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Current Status	parameter	help
Local IP	<p>IP Type: <input type="text" value="Static IP"/></p> <p>Static IP: <input type="text" value="192"/> . <input type="text" value="168"/> . <input type="text" value="1"/> . <input type="text" value="7"/></p> <p>Submask: <input type="text" value="255"/> . <input type="text" value="255"/> . <input type="text" value="255"/> . <input type="text" value="0"/></p> <p>Gateway: <input type="text" value="192"/> . <input type="text" value="168"/> . <input type="text" value="1"/> . <input type="text" value="1"/></p> <p>Dns Server: <input type="text" value="192"/> . <input type="text" value="168"/> . <input type="text" value="1"/> . <input type="text" value="1"/></p> <p><input type="button" value="Save"/> <input type="button" value="Cancel"/></p>	<ul style="list-style-type: none"> <li>• <b>IP type:</b> StaticIP or DHCP</li> <li>• <b>StaticIP</b> Module's static ip</li> <li>• <b>Submask</b> usually 255.255.255.0</li> <li>• <b>Gateway</b> Usually router's ip address</li> </ul>
Modbus		
Config		
Reboot		

## Default Parameters

IP Type	Static IP
Static IP	192.168.1.7
Submask	255.255.255.0
Gateway	192.168.1.1
Dns Server	192.168.1.1

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Current Status	parameter	help
Local IP	Baud Rate: <input type="text" value="9600"/> bps(600~230400)bps	<ul style="list-style-type: none"> <li>• <b>local port</b> 1~65535. when TCP Client, set this to 0 means use random local port</li> <li>• <b>remote port</b> 1~65535</li> <li>• <b>packet time/length</b> default 0/0, means automatic packet mechanism; you can modify it as a none-zero value</li> </ul>
Modbus	Data Size: <input type="text" value="8"/> bit	
Config	Parity: <input type="text" value="None"/>	
Reboot	Stop Bits: <input type="text" value="1"/> bit	
	Flow Control: <input type="text" value="None"/>	
	UART Packet Time: <input type="text" value="0"/> (0~255)ms	
	UART Packet Length: <input type="text" value="0"/> (0~1460)chars	
	Sync Baudrate(RF2217 Similar): <input checked="" type="checkbox"/>	
	Enable Uart Heartbeat Packet: <input type="checkbox"/>	
	<b>Socket A Parameters</b>	
	Work Mode: <input type="text" value="TCP Server"/> <input type="text" value="ModbusTCP"/>	
	Local/Remote Port Number: <input type="text" value="502"/> <input type="text" value="23"/> (1~65535)	
	PRINT: <input type="checkbox"/>	
	ModbusTCP Poll: <input type="checkbox"/> Poll Timeout : <input type="text" value="200"/> (200~9999) ms	
	Enable Net Heartbeat Packet: <input type="checkbox"/>	
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## Default Parameters

Baudrate 9600  
 Data Size 8  
 Parity None  
 Stop Bits 1  
 Flow Control None

Work Mode TCP Server, Modbus TCP  
 Port Number 502  
 Poll Timeout 200ms

**SMG.100**

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Current Status	parameter	help
Local IP	Module Name: <input type="text" value="SMG.100"/>	<ul style="list-style-type: none"> <li>• <b>module name</b> max length is 15 char</li> <li>• <b>Web port</b> default 80</li> <li>• <b>ID and ID type</b> we could use it for D2D</li> <li>• <b>Mac address</b> user could modify this MAC address</li> <li>• <b>Buffer data</b> default not checked, buffer data before tcp connection established</li> <li>• <b>reset timeout</b> default 0, 0-60 mean no timeout, &gt;60 mean when there is no data received during this time, the device will restart</li> </ul>
Modbus	Websocket Port : <input type="text" value="6432"/>	
Config	Webserver Port: <input type="text" value="80"/>	
Reboot	MAC Address: <input type="text" value="d8-b0-4c-da-fd-52"/>	
	User Name: <input type="text" value="admin"/>	
	Pass Word: <input type="text" value="admin"/>	
	Buffer Data Before Connected: <input type="checkbox"/>	
	Reset Timeout: <input type="text" value="3600"/> (60~65535) s	
	<input type="button" value="Save"/> <input type="button" value="Cancel"/>	

## Default Parameters

Module Name	SMG.100
Websocket	6432
Webserver	80
MAC	uniq id
User name	admin
Password	admin

**SMG.100**

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Current Status

Reboot/Reset

help

Local IP

Restart Module

Restart Module

Modbus

Config

Reboot

- **Reboot:**  
Click to make  
your config take  
effect

Whenever you can change any parameter, you have to Restart the unit.  
It will restart with updated parameters in a few seconds.