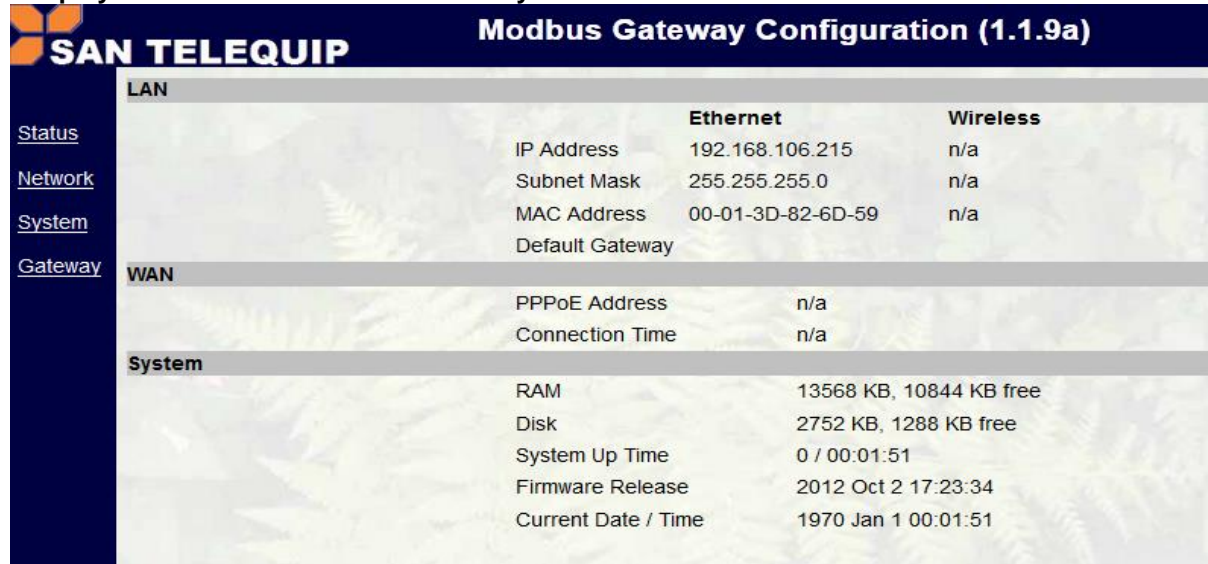


Document Name: User Manual for SC10MK Modbus RTU to Modbus TCP Converter.

Login for the first time, please use <http://192.168.1.100>
 To key in user name and password is for identifying authorization. Default user name characters are "admin" and password characters are " "(empty). And then just click "OK" button.

Status

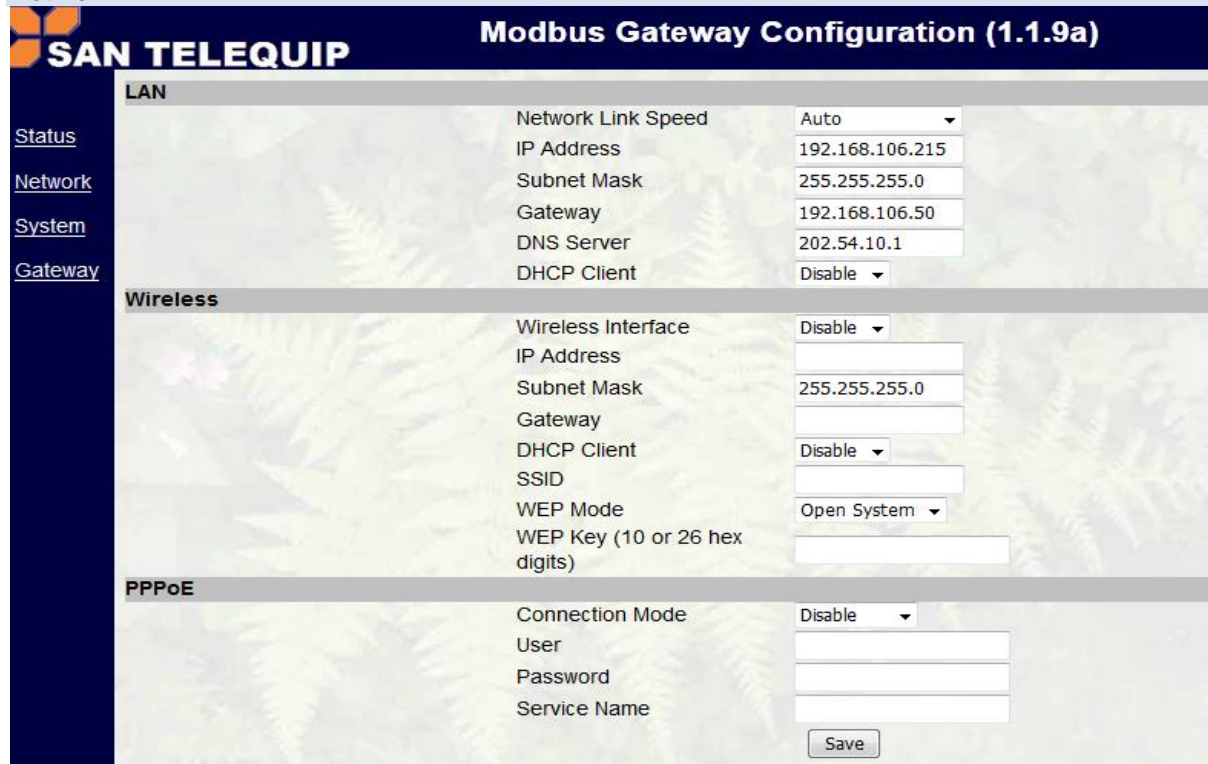
Display current status and time of the system



SAN TELEQUIP Modbus Gateway Configuration (1.1.9a)

LAN	Ethernet	Wireless
IP Address	192.168.106.215	n/a
Subnet Mask	255.255.255.0	n/a
MAC Address	00-01-3D-82-6D-59	n/a
Default Gateway		
WAN	PPPoE Address	n/a
Connection Time	n/a	
System	RAM	13568 KB, 10844 KB free
Disk	2752 KB, 1288 KB free	
System Up Time	0 / 00:01:51	
Firmware Release	2012 Oct 2 17:23:34	
Current Date / Time	1970 Jan 1 00:01:51	

Network



SAN TELEQUIP Modbus Gateway Configuration (1.1.9a)

LAN	Network Link Speed	Auto
IP Address	192.168.106.215	
Subnet Mask	255.255.255.0	
Gateway	192.168.106.50	
DNS Server	202.54.10.1	
DHCP Client	Disable	
Wireless	Wireless Interface	Disable
IP Address		
Subnet Mask	255.255.255.0	
Gateway		
DHCP Client	Disable	
SSID		
WEP Mode	Open System	
WEP Key (10 or 26 hex digits)		
PPPoE	Connection Mode	Disable
User		
Password		
Service Name		
		<input type="button" value="Save"/>

Modbus Gateway Configuration:

1. LAN:

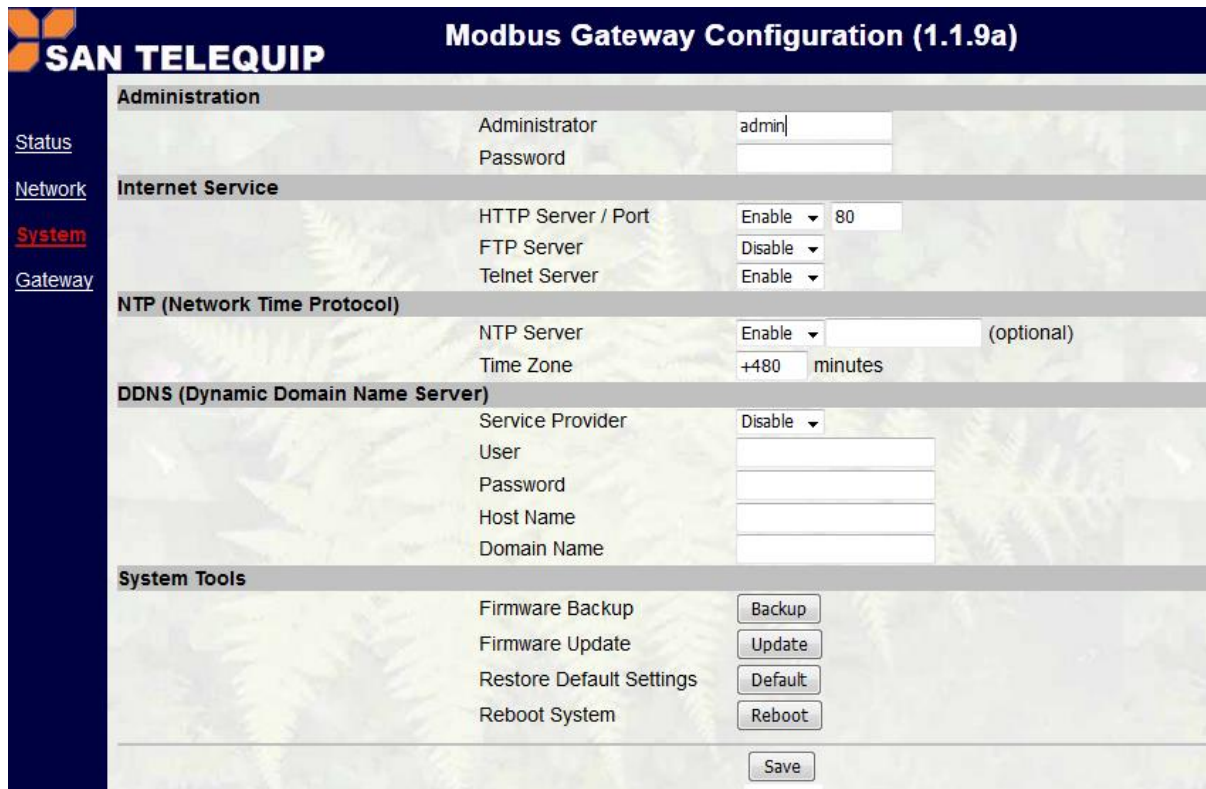
- a) Network Link Speed: default value is "Auto"
- b) IP Address : default value is "192.168.1.100"
- c) Subnet Mask : default value is "255.255.255.0"
- d) Gateway : default value is "blank"
- e) DNS Server : default value is "192.95.192.1"
- f) DHCP Client : Network configuration information automatically acquired default value is "Disable"

2. Wireless. Not Available at the moment (**For** future requirement.)

3. PPPoE: Ethernet Point to Point Protocol Internet, through ADSL modem connected to the Internet.

- a. Connection Mode : Disable, Always-on, Manual. Default Value is "disable"
- b. User Name : ADSL dial-up account
- c. Password : ADSL account password.
- d. Service Name : definable

System



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1. Administration

- a) Administrator : The default value is admin.
- b) Password : self changeable, the default value is empty.

2. Internet Service

- a. HTTP Server / Port : Enable/Disable, the port default is 80.
- b. FTP Server : Enable/Disable, The default is Disable.
- c. Telnet Server : Allows the user to re-connect remotely using the telnet server Enable/Disable

3. NTP (Network Time Protocol): This option can automatically update the system time

- a) NTP Server : Enable/ Disable
- b) Time Zone : Choose

4. DDNS Dynamic Domain Name Server

- a) Service Provider : Disable /no IP, The default is Disable
- b) User : registered account
- c) Password : password of registered account
- d) Host Name : the URL
- e) Domain Name: : Contact your System Admin for details

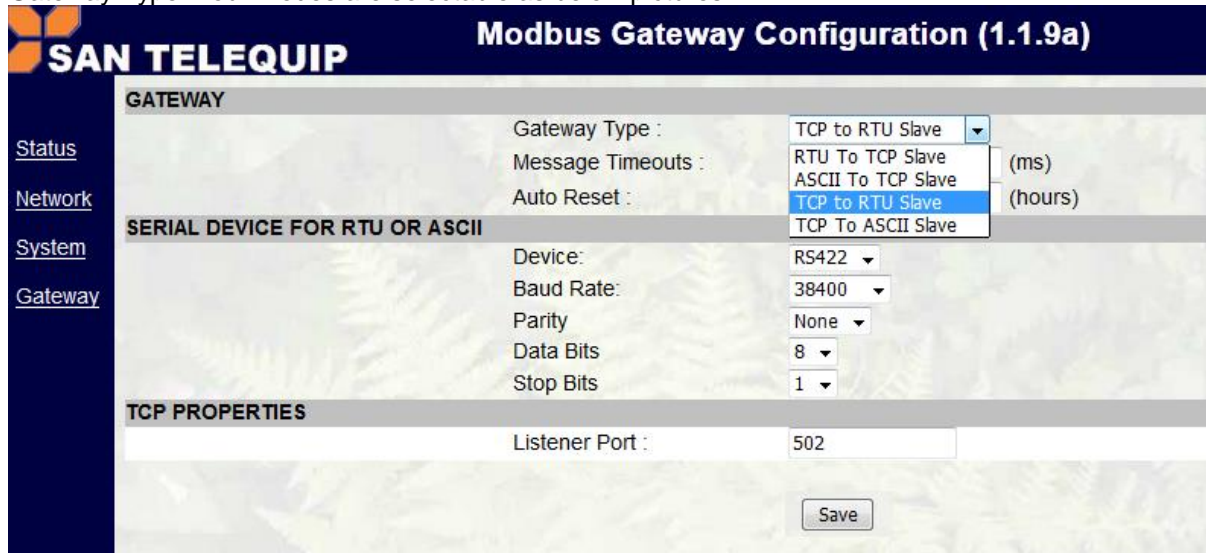
5. System Tool:

- a) Firmware Backup : Users can follow the instructions to save the firmware data file.
- b) Firmware Update : Prepare the updated firmware first and upload the firmware accordingly to the instruction.
- c) Restore Default Settings
- d) Reboot System:

After change parameters, please be sure to click below to save the parameter.

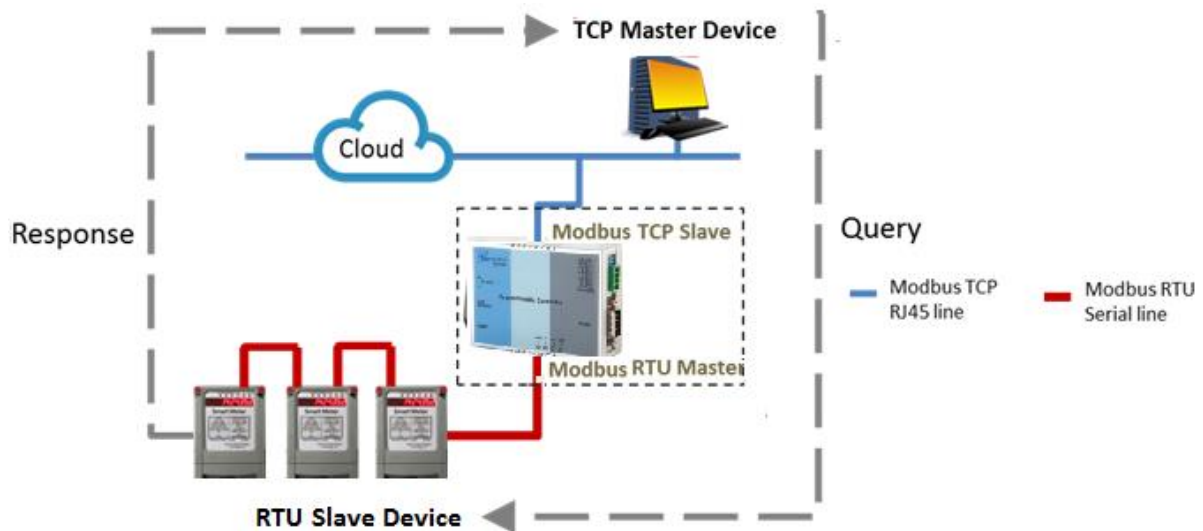
Gateway

Gateway Type: Four modes are selectable as below pictures

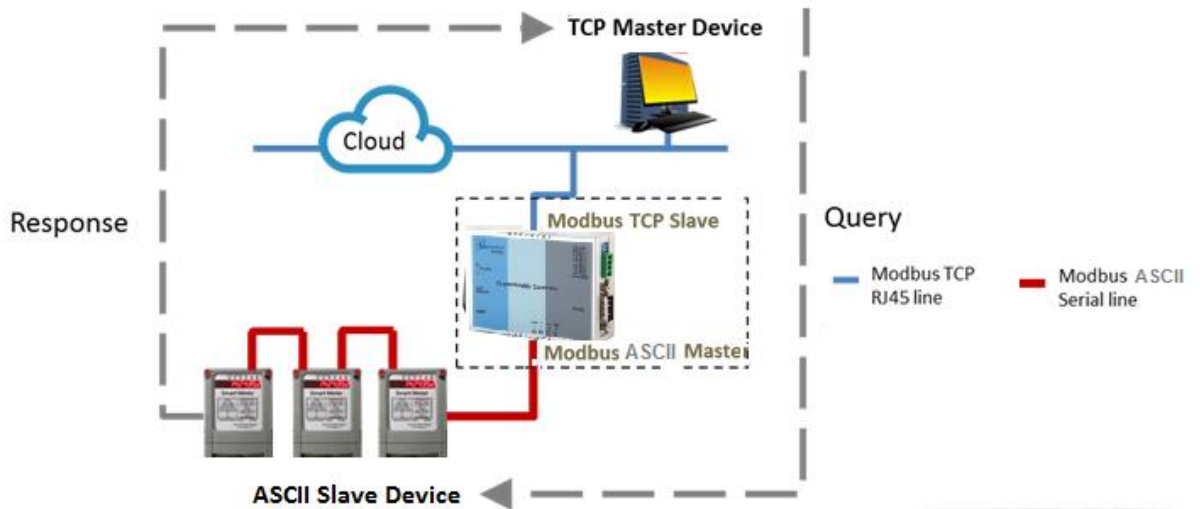


The screenshot shows the 'Modbus Gateway Configuration (1.1.9a)' window. On the left is a navigation menu with 'Gateway' selected. The main area is divided into sections: 'GATEWAY', 'SERIAL DEVICE FOR RTU OR ASCII', and 'TCP PROPERTIES'. In the 'GATEWAY' section, 'Gateway Type' is set to 'TCP to RTU Slave'. A dropdown menu is open showing other options: 'RTU To TCP Slave', 'ASCII To TCP Slave', 'TCP to RTU Slave' (highlighted), and 'TCP To ASCII Slave'. 'Message Timeouts' is set to '(ms)' and 'Auto Reset' is set to '(hours)'. The 'SERIAL DEVICE' section shows 'Device' as 'RS422', 'Baud Rate' as '38400', 'Parity' as 'None', 'Data Bits' as '8', and 'Stop Bits' as '1'. The 'TCP PROPERTIES' section shows 'Listener Port' as '502'. A 'Save' button is at the bottom right.

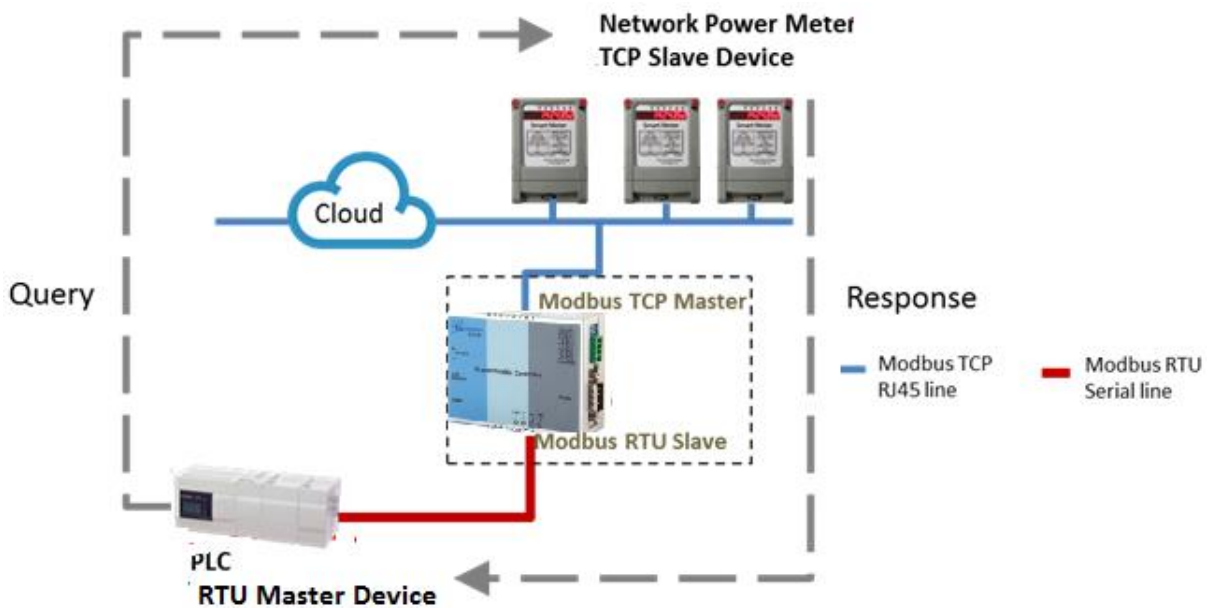
TCP to RTU Slave :- diagram as below. TCP Master Device (ex. Modscan / SCADA system) sends query to RTU Slave device then RTU Slave device response back to TCP Master's requirement. Inside the Modbus gateway, there are TCP Slave & RTU Master counterparts respectively



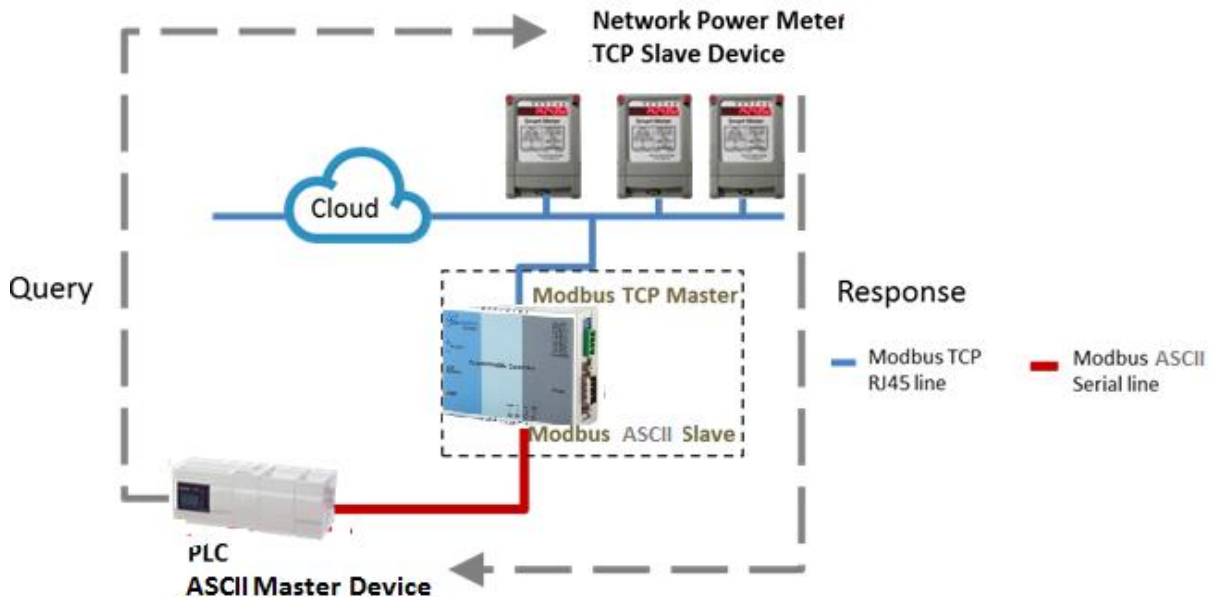
TCP to ASCII Slave : TCP Master Device (ex. Modscan / SCADA system) sends query to ASCII Slave device then ASCII Slave device response back to TCP Master's requirement. Inside the Modbus gateway, there are TCP Slave & ASCII Master counterparts respectively



RTU to TCP Slave : Diagram as below. RTU Master Device (ex. PLC / Modscan) sends query to TCP Slave device; then TCP Slave device response back to RTU Master's requirement. Inside the Modbus gateway, there are TCP Master & RTU Slave counterparts respectively.



ASCII to TCP Slave : ASCII Master Device (ex. PLC / Modscan) sends query to TCP Slave device; then TCP Slave device response back to ASCII Master's requirement. Inside the Modbus gateway, there are TCP Master & ASCII Slave counterparts respectively.



GATEWAY

1. Gateway Type : default value is TCP to RTU Slave.
2. Message Timeouts : default value is 500ms
3. Auto Reset : default 0 hours

Serial Device for RTU or ASCII

1. Device : Serial device type currently supports RS232, RS485 and RS422
2. Baud Rate : 300 to 230kbps.
3. Parity : None, Odd, Even
4. Data Bits : 5,6,7,8.
5. Stop Bits : 1, 2

TCP Properties

- TCP Slave : Port can be specified, if not specified will use the default value 502.

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COMMUNICATION PORT DETAILS

RS232 Port Details of SC10MKI

Pin No.	SIGNAL of SC10MKI
9 Pin D Male	
2	RX
3	TX
5	GND
7	RTS
8	CTS
4	DTR
6	DSR

CABLE DETAILS OF SC10MKI

For RS232 Side

SC10MKI Side	COM Port Side
TX	RX
RX	TX
RTS	CTS
CTS	RTS
DSR	DTR
DTR	DSR

For RS422

SIGNAL of SC10MKI	Will Connect to
TX +	RX + of your device.
TX --	RX -- of your device.
RX +	TX + of your device.
RX --	TX -- of your device.

For RS485, 2 wire

SIGNAL of SC10MKI	Will Connect to
D + / RX+	TX + of your device.
D -- / RX-	TX -- of your device.

POWER SUPPLY

24V DC through 2 Pin screw type connector

USB

For future requirement.

LED INDICATION

- PWR : When the Power is on the green LED will be ON.
- SYS : Will blink every second once the system starts.
- 10M : The green LED will light and blink when network speed is 10M.
- 100M : The red LED will light and blink when network speed is 100M