1. PRODUCT PROFILE



2. OVERVIEW

Serial to Ethernet (S2E) converter is a communication device that allow you to control serial data over a TCP / IP based Ethernet.

3. SPECIFICATIONS

ITEM	SPECIFICATIONS
Power supply	
Supply Voltage	12 to 30 VDC
Power Consumption	<1VA
SERIAL INTERFACE	
Serial Standard	RS485
No. of ports	1
Connector	Green 3 Pin Screwable terminal
Protocol	Modbus RTU
Baudrate	300 bps to 115200 bps
Data bits	7, 8
Stop bits	1, 2
Parity	None, Odd, Even
RS485 Signal	Data+, Data-
RS485 Data Direction Control	Auto
ETHERNET INTERFACE	
Connector	8 pin RJ45
No. of Ports	1
Speed	10/100 Mbps
Transmission Distance	Max upto 100 m
Protocol	TCP (Server,client),Modbus TCP
Standards	IEEE802.3,IEEE802.3u
Magnetic Isolation Protection	1.5KV
IP Configuration	DHCP, Static IP
Signal	Tx+, Tx– , Rx+, Rx–
MECHANICAL SPECIFICATIONS	
Dimension (W x H x D)	35 mm x 90 mm x 88 mm
Weight (g)	87.1
Mounting	Din Rail Mounting
ENVIRNMENTAL CONDITION	
Operating Temperature	0°C to 55°C
Storage Temperature	-20°C to 70°C
Humidity (non- condensing)	10% to 95% RH

LED Indication & RESET Key:

Indicator	Function	Description
Power	Power is ON	Converter has power
Link	Network link	IP Status LED
TX	Rs485 Transmit data	Flashing when sending data
RX	Rs485 Receive data	Flashing when receiving data
Reset	Factory Reset	Reset switch for Factory reset

DEVICE DEFAULT SETTINGS:

Network Setting : DYNAMIC IP,TCP protocol.
Serial Setting : 9600,8,N,1
Mode Setting : Transparent Mode,TCP Server,MODBUS RTU.

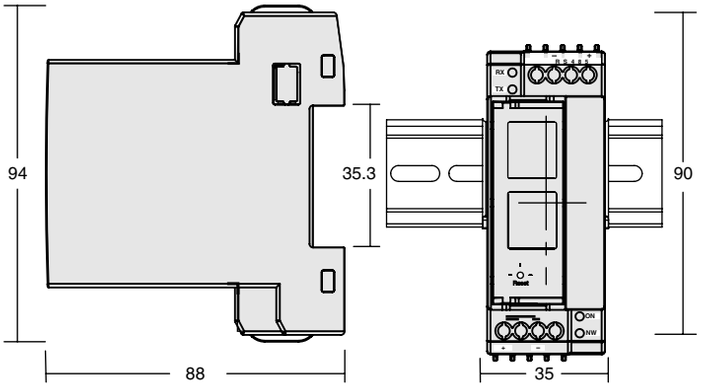
DEVICE POWER ON SEQUENCE:

NETWORK LED : The LED blinks once at start up.The LED then fast blinks when it gets IP as per the network configured DHCP/STATIC.
The LED remains off after this and will turn on when client /server is connected and will turn off when client /server is disconnected.
TX/RX LED : These led will blink when network is connected and serial device reading is going on.

DEVICE FACTORY RESET SEQUENCE:

In order to factory reset the device to default setting press and hold the reset button for more than 5 seconds till all 3 LED's are turned on. Once all 3 LED's are turned on then the device has entered factory rest mode and will reset all setting to default and restart it self for new setting to take effect. At restart all 3 LED's will turn off(Network, TX and RX LED).

4. DIN RAIL MOUNTING / DIMENSION



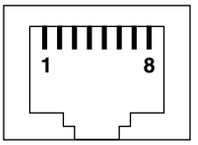
Dimensions in mm

- Install the device in an enclosure with sufficient space around it to allow heat dissipation,
- Be sure to use DIN rail clamp to stop movement of the device.
- The clamp is at the bottom of the device. To secure the device to DIN rail, Push down the device until it click.
- To remove the device, pull the clamp down with a flat screwdriver and gently pull the device up to remove from DIN rail.

5. PIN ASSIGNMENTS

Ethernet port

PIN	Signal
1	Tx +
2	Tx –
3	Rx +
4	---------
5	---------
6	Rx –
7	---------
8	---------



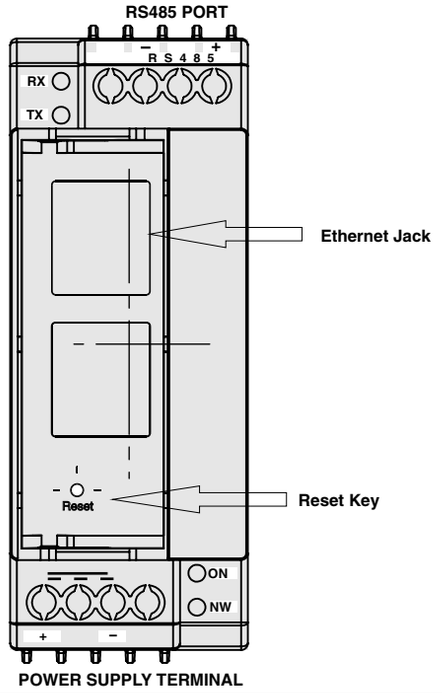
RS485 Pinout :

PIN	Signal
1	RS485+
2	---------
3	RS485-
4	---------

Power Supply Pinout :

PIN	Signal
1	+VCC
2	---------
3	GND
4	---------

6. CONNECTION DIAGRAM



7. WIRING INSTRUCTIONS

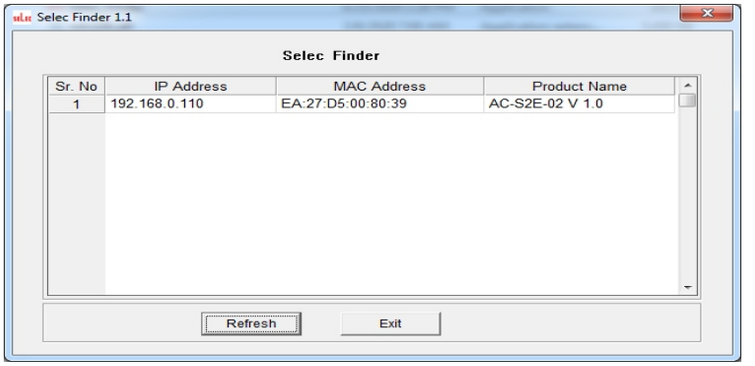
1. Ethernet cable used (cat5),5e.6,6a for 10/100 functionality.
2. Shielded twisted pair ethernet cable for patch application/desktop use.
3. Flexible and resilient rasion to work with shorter lengths.
4.Lay cables at a distance not less than 25 cm from power cable.
5. Suitable diameter cable for power supply on account of voltage drop.

8. CONFIGURATION:

Windows utility : Used for IP finding, network configuration, serial configuration.
OS Support for Utility : 32-bit/64-bit Windows XP/Vista /7/8/8.1/10, windows server 2003/2008/2008R2/2012 R2
Utility link : Download from website- ***www.selec.com/software/ac-s2e-02 utility*** (configuration utility for converter)

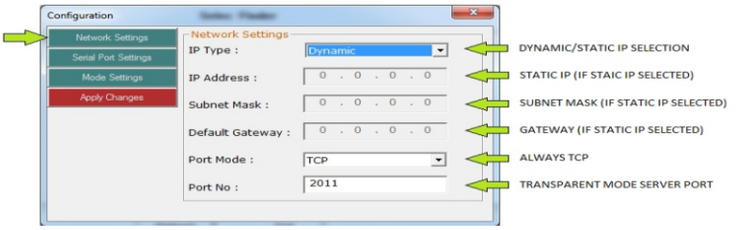
SELEC FINDER UTILITY OVERVIEW : The Selec Finder Utility is used to find out and configure Selec ethernet devices on the network. The utility will list all the selec devices on the ethernet network and the information will contain IP address, MAC Address and Devices Description string. This utility can be further used to configure various network settings, serial settings and mode settings of the S2E Devices.

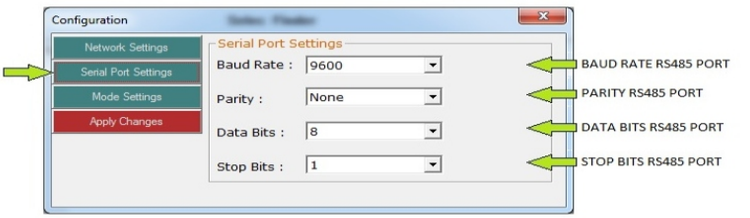
Step1 : Run the selec finder utility and it should look some thing like this when the screen pops up.

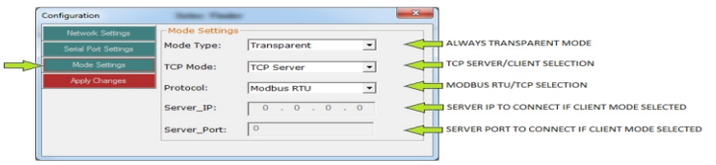


As shown above the screen display the selec devices in the network using IP Address, MAC Address and Product name .The device to be configured should be seen in this list. If not then you can refresh the screen by pressing the refresh button

Step 2 : Double click on the IP Address of the device you want to configure. The screen pops up showing existing configuration settings in various settings tabs which are network serial and mode. The screen displayed is as shown below. You can go to any tab just to view the existing settings. just click on the tab and existing settings will be displayed. All 3 images showing existing settings. are shown below. this is just a example and actual value in different settings tab will vary as per existing config in the device.







Step 2 : Make any relevent changes in the config and then click on **Apply changes** button which should display the following screen on succsessful communication. Click ok and close the window.



In case of error click ok on error message window and restart the procedure from step1.

(Specifications are subject to change, since development is a continuous process.)

Selec Controls Pvt. Ltd., India

Factory Address :
EL-27/1, Electronic Zone, TTC Industrial Area, MIDC, Mahape,
Navi Mumbai - 400 710, INDIA.
Tel. No. : +91-22-41 418 419/430 I Fax No. : +91-22-28471733
Toll free : 1800 227 353 (BSNL/MTNL Subscribers only)
Website : www.selec.com I Email : sales@selec.com