

## SE-SPG

### SCADA Protocol Gateway

Operations in industrial applications are kept running using different devices, with each device employing its own protocol. More and more operators are taking advantage of industrial protocol gateways to accomplish protocol conversions to keep operations running smoothly. More important, they can keep using their legacy devices to minimize cost

The SCADA Protocol Gateway provides seamless communication between fieldbus and industrial automation developed and supports multiple devices with different protocols. As a product of knowledge and experience of Saba Energy Company in automation, telemetry and SCADA, the Gateway is a device which gathers and processes data from various equipment (such as meters, transmitters, power meters, IEDs, ...), then transmits and sends data to higher level centers. Moreover, it receives data from control centers and transmits it to actuators, controllable switch and other devices

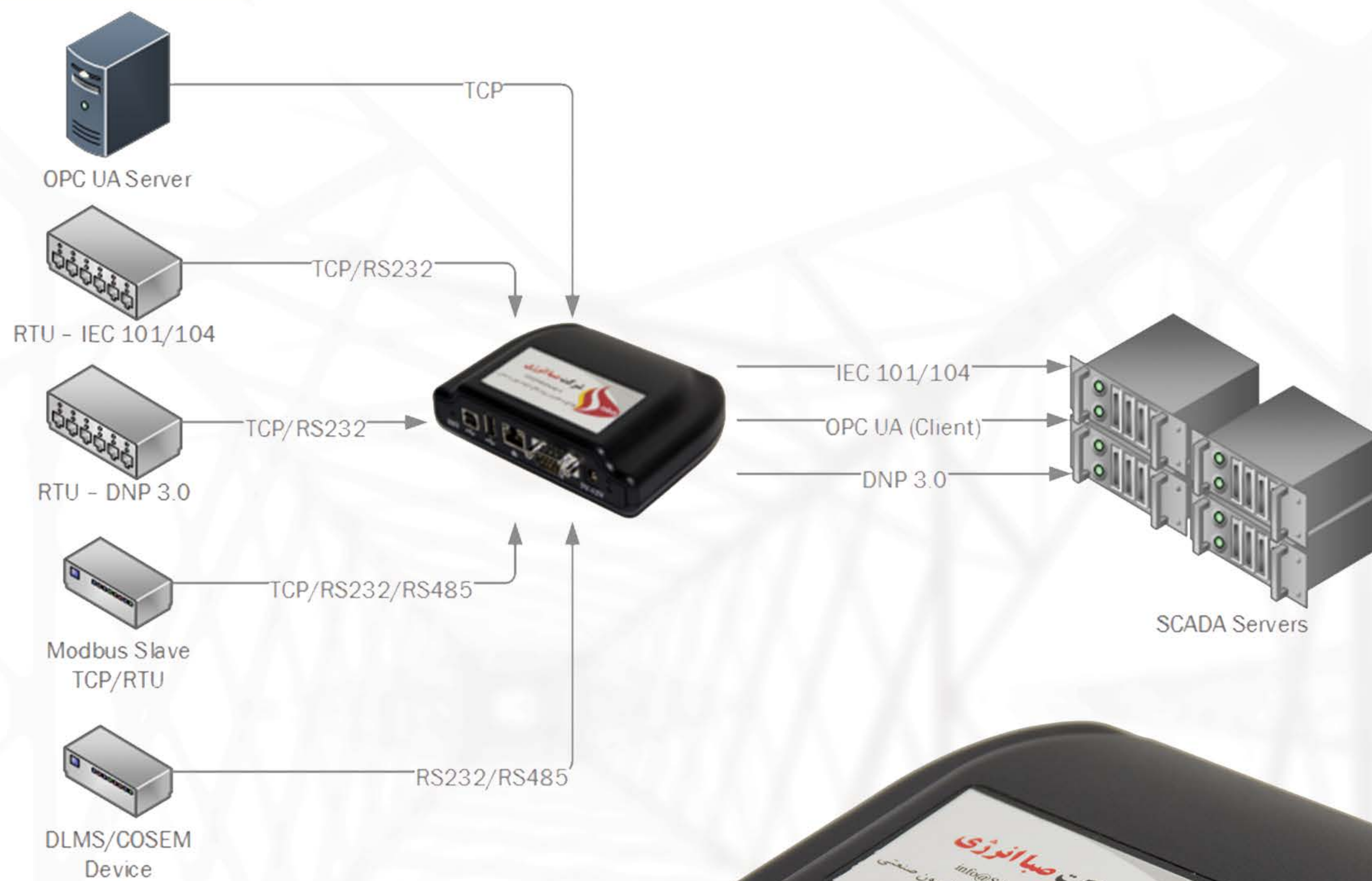


Figure 1: SE-SPG

### Features:

- Supports various input field and automation protocols including IEC 60870-5-101/104, DNP3.0, Modbus and DLMS
- The Gateway's OPC UA Client supports up to 8 OPC UA Servers
- Supports IEC 60870-5-101/104 and DNP 3.0 as output protocols
- Runs an OPC UA Server to share data with OPC UA Clients
- Modbus Master module of the Gateway supports Modbus Slaves in RTU and TCP modes
- Using serial (RS-232 and RS-485) and LAN ports, the Gateway provides multiple connection as input and output
- Designed for protocol extensibility and adaption
- Fully configurable by means of a user-friendly GUI
- Built-in real time diagnostic to increase highly efficiency of device management

## Topology of SE-SPG



## SE-SPG Hardware Specifications:

### General

- 250MHz ARM9 CPU
- 64MB DDR-RAM
- 256MB SLC XNAND Drive
- Uses 5-12V DC or USB for Power In
- Low Power (< 3.2Watts)
- 1 Micro SD Card Slot
- 1 External USB Host Port, 480Mbit/s
- 1 Internal USB Host Port, 480Mbit/s
- Watchdog Timer
- Battery Backed RTC and Temp. Sensor
- Boots Linux 2.6 in less than 3 Seconds
- Supports various

### Ethernet Communication

- 8-pin RJ45 Connector
- 1 10/100 Ethernet, Optional PoE

### Serial Communication

- DB9 male Connector
- 3 Serial Ports (2xRS-232 and 1xRS-485)

### Mechanical

- Dimension: 39.88mm (W) x 102.02mm (D) x 35.06mm (H)
- Weight: 351gr (approx.)
- Plastic Enclosure
- DIN Mountable Enclosure
- Fan less Operation from -20°C to 70°C



### Input protocols

- **OPC UA**  
Client Mode (Max No. of Connection: 8)
- **IEC 60870-5-101/104**  
Master Mode (Max No. of Connection: 2)
- **DNP 3.0**
- **Modbus RTU/TCP**  
Function Support: 1, 2, 3, 4, 5, 6, 15, 16  
Master Mode (Max No. of Conn.: 8TCP, 2Serial)
- **DLMS/COSEM**  
Client Mode (Max No. of Connection: 2)

### Output protocols

- **OPC UA**  
Server Mode (Max No. of Connection: 64)
- **IEC 60870-5-101/104**  
Slave Mode (Max No. of Connection: 1)
- **DNP 3.0**  
Slave Mode (Max No. of Connection: 1)