

# 18.1 Devices sheet

Devices sheet contains all devices to be configured on the gateway. Each row represents one device and its settings. Following options are required for each device:

- **name** - Name of the device. Used for representation only.
- **description** - A short description of the device. Used for representation only.
- **device\_alias** - A unique short name for the device. It is used for linking signals to a device.



An alias can only contain alphanumeric characters and dashes ( - and \_ ). The alias must be unique for each device.

- **protocol** - Protocol type to use on the device. The exact values of protocols are written in every protocol documentation. Please look into the range of supported protocols:

## IEC 61850 MMS:

- IEC 61850 Client (since FW 1.5.0)
- IEC 61850 Server (since FW 1.5.0)

## IEC 60870-5:

- IEC 60870-5-101 master
- IEC 60870-5-101 slave
- IEC 60870-5-103 master
- IEC 60870-5-104 master
- IEC 60870-5-104 slave

## DNP 3.0 Serial/LAN/WAN:

- DNP3 Master
- DNP3 Slave

## Modbus Serial/TCP:

- Modbus RTU/ASCII
- Modbus TCP

## Metering protocols:

- DLMS/COSEM (since FW 1.3.0)
- IEC 62056-21 (since FW 1.2.13)
- MBus Serial
- MBus TCP
- Elgama (Meters based on IEC 62056-21 / 31 protocols)


## Industrial IOT protocols:

- MQTT
- RESTful API

## Specific protocols:

- Aurora (ABB PV inverters protocol)
- PowerOne (ABB PV inverters protocol)
- SMA Net (SMA PV inverters protocol)

- Kaco (Kaco PV inverters protocol)
- Ginlong (Ginlong PV inverters protocol)
- Solplus (Solutronic AG PV inverters protocol)
- ComLynx (Danfoss PV inverters protocol)
- Delta (Delta PV inverters protocol)
- Windlog (Wind sensors from RainWise Inc.)
- Vestas ( Wind turbines protocol)
- Internal data
- VBus.

 Although device name rules aren't strictly enforced, it is highly advised to give a unique name to every new device. Identical device names might introduce confusion while searching for signals in the Imported Signals tab.

## Optional settings

- **enable** - Flag to enable or disable a device on the system. Can contain values 0 or 1.
- **event\_history\_size** - Maximum number of signal events to save on device for later review. Older records will be erased. This feature is only available on cloud firmware.


## Serial port settings

Required for any protocol that uses serial line communication.

- **device** - Serial port for communication (**PORT1/PORT2**)
- **baudrate** - Serial port speed. Valid values: **300; 600; 1200; 2400; 4800; 9600; 19200; 38400; 57600; 115200**
- **databits** - Number of data bits (6-9)
- **stopbits** - Number of stop bits (1-2)
- **parity** - Parity mode (none/even/odd)
- **flowcontrol** - Flow control method (none/hardware/software)

## TCP/IP settings

Settings for any protocol that uses communication over TCP/IP. Note that all TLS certificates and keys are stored in a single folder therefore only the name and not the path should be filled in respective fields.

 TLS fields are only supported for IEC 61850 Client and Server, IEC-60870-5-104 Slave, and DNP3 Master and Slave, MQTT.

- **ip** - IP address for a master protocol to connect to;
- **bind\_address** - one of the local IP addresses to bind the server to. Connections through other network devices will be ignored;
- **host** - space-separated host IP addresses of master devices;
- **port** - TCP port to listen for incoming connections;
- **tls\_local\_certificate** - the name of local TLS certificate;
- **tls\_peer\_certificate** - the name of a certificate authority (CA) TLS certificate;
- **tls\_private\_key** - the name of a private key for making TLS connections.

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