

JPEmbedded's IEC 61850 – apis enables communication between the Intelligent Electronic Devices (IED's) operating in IEC 61850 networks and other devices which do not support this standard. It converts the most popular protocols like Modbus, 60870-5-103, 60870-5-104, DNP3, MQTT to IEC 61850. Gateway may be ordered as a standalone product, easily mountable at din-rail or, as a hardware module to integrate in the device.

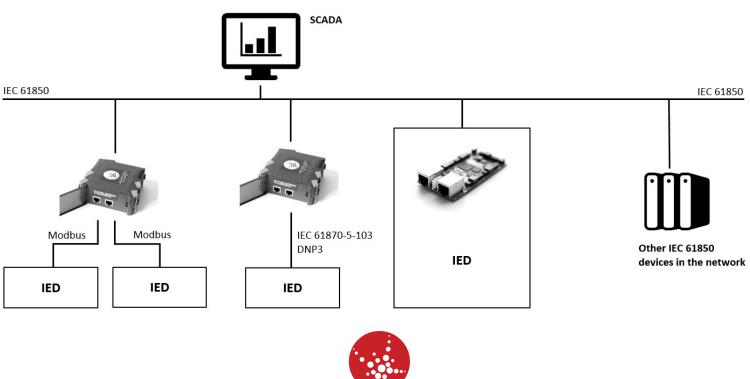
IEC 61850 is an international standard describing data model and communication services for power grid devices. IEC 61850 improves interoperability between systems provided by diverse manufacturers.

#### **KEY FEATURES**

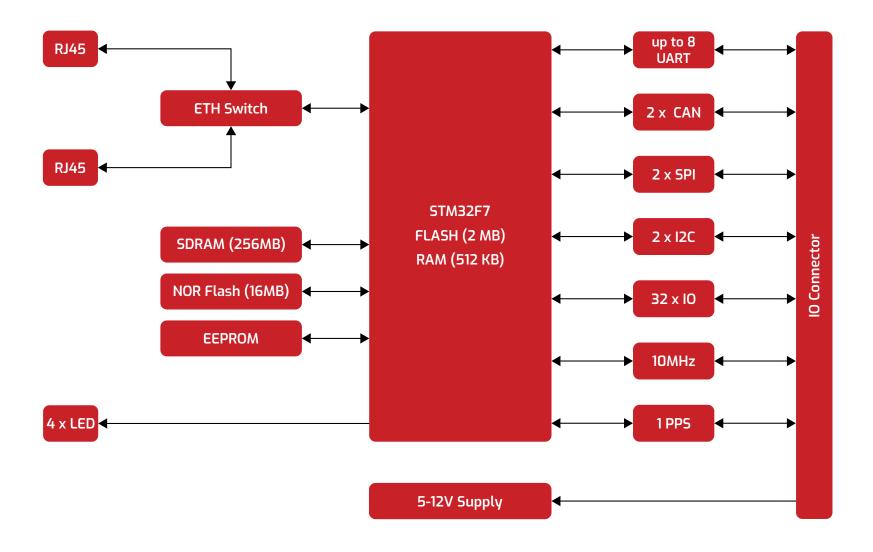
- · Conversion of various protocols (Modbus RTU, Modbus TCP, IEC 60870-5-103, IEC 60870-5-104, DNP3, MQTT, Profinet) to IEC 61850.
- · Certified IEC 61850 stack.
- · Support of MMS, GOOSE and SV communication.
- · Secure communication according to IEC 62351.
- · Different physical interfaces: CAN, I2C, SPI, RS 485, Ethernet.
- · Manageable switch with two ports.



# **APPLICATION**



### **SYSTEM ARCHITECTURE**



# **PROTOCOLS**

IEC 60870-5-103	Modbus TCP	MQTT
IEC 60870-5-104	Modbus RTU	PROFINET
DNP 3		

## **TECHNICAL SPECIFICATION**

<u>System</u>		Inputs and outputs	Mechanical Casing dim.	110x45x120 mm
CPU Memory	STM32F7, 216MHz 16MB SDRAM 16MB Nor Flash	ETH x 2 UART x 8 CAN x 2	Installation PCB dim.	DIN-Rail mount 49x18x96 mm
	2MB Nand Flash	SPI x 2 I2C x 2	Power supply 12V - 50V DC	
os	FreeRTOS	SD USB AB	110V-220V AC	
LED	4 configurable LEDs	GPIO x 32 1 PPS signal 10 MHz signal	Environmental Operating Temp. Storage Temp.	-20÷60°C -30÷80°C

