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## JPE 61850 – papilio

Modbus/MQTT to IEC 61850 converter

Internet of Things continues to be one of the key technology trends in the recent years and utilities representing the energy market understand its advantages. Well-thought integration of the IoT with existing smart grids will extend benefits beyond distribution, automation and monitoring, making energy use more efficient and saving billions of Euros. JPEEmbedded's JPE 61850 – papilio gateway is a cost saving, hardware solution allowing integration of various IoT devices with the grid.

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.

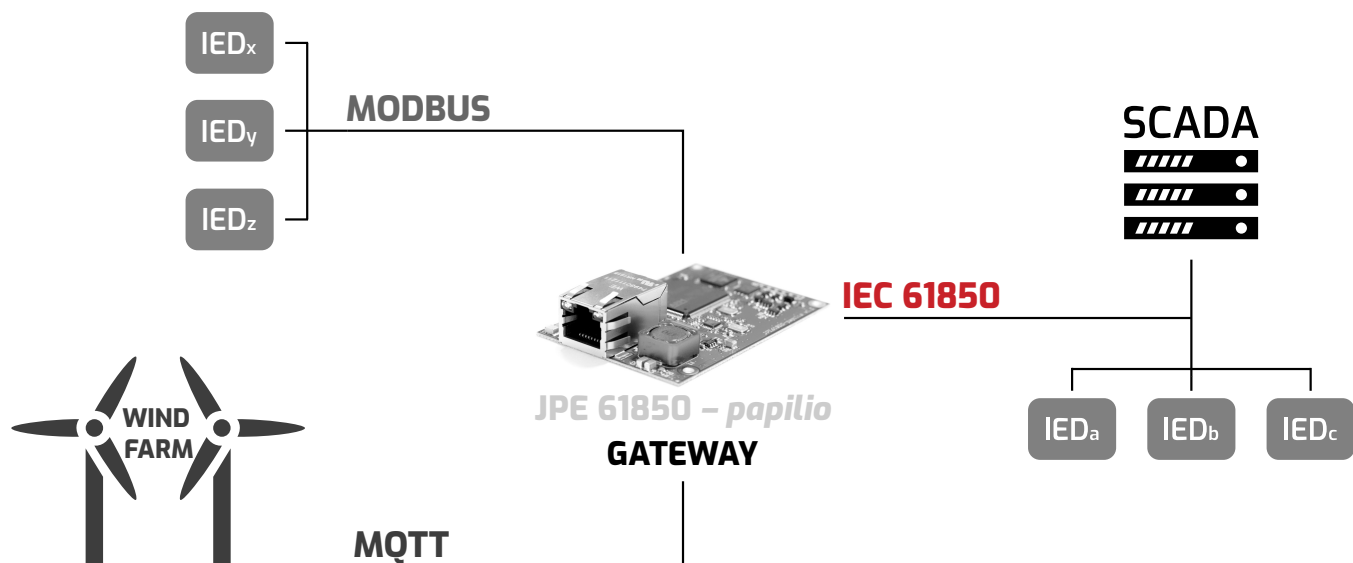
### KEY FEATURES

- Conversion of MQTT, Modbus RTU, Modbus TCP and IEC 60870-5-103 to IEC 61850.
- Certified IEC 61850 stack.
- Full IEC 61850 support including MMS, GOOSE, and SV communication.
- User friendly configuration interface.
- Connection of a few devices to IEC 61850 network at the same time (one-to-many).
- Low cost solution.
- Easy mapping and configuration by our *Drosera* application.



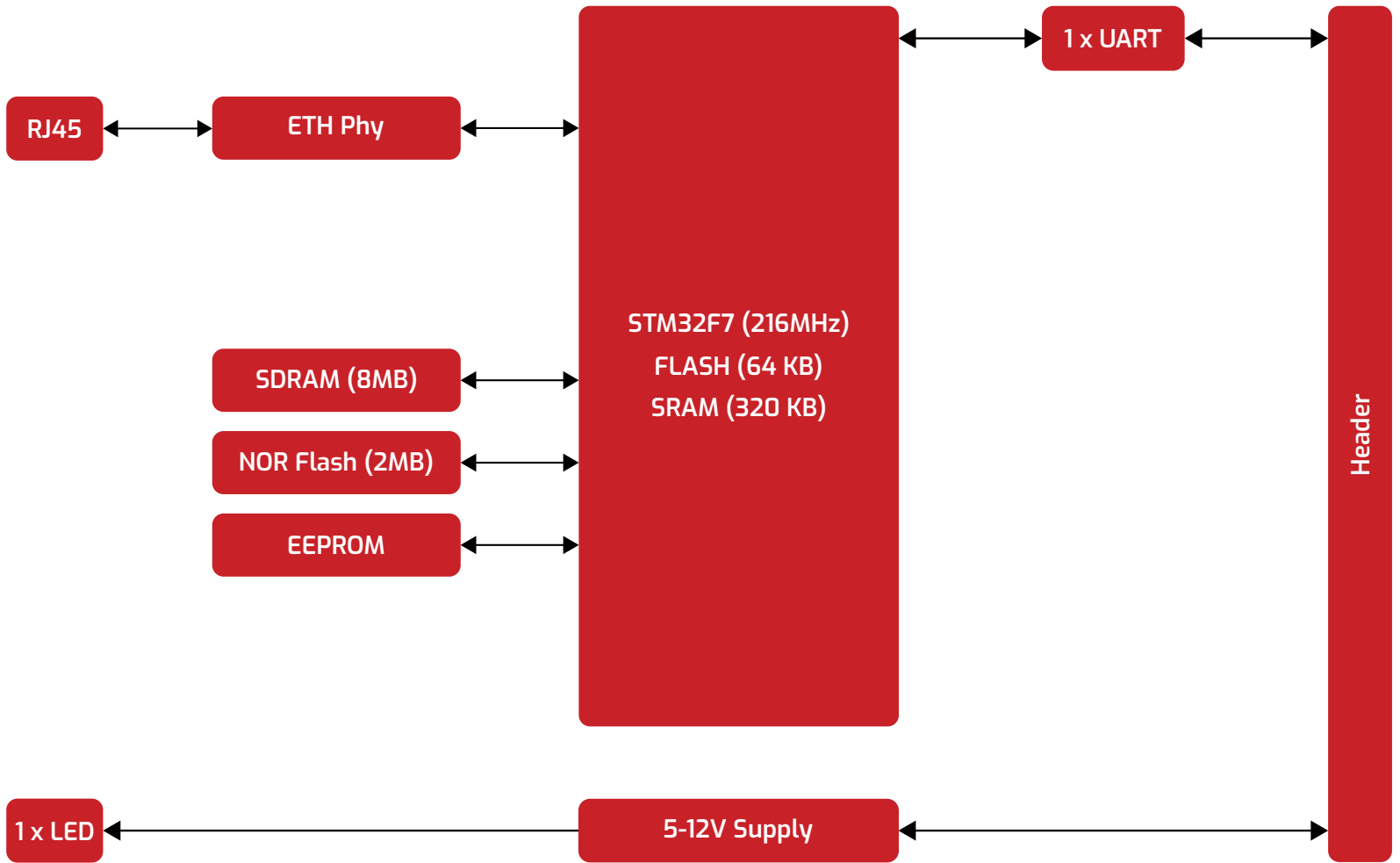
Scan to meet *Drosera*

### APPLICATION



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# SYSTEM ARCHITECTURE



## PROTOCOLS

Modbus TCP Modbus RTU	MQTT IEC 60870-5-103	IEC 61850
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## TECHNICAL SPECIFICATION

System		Inputs and outputs	Mechanical
<b>CPU</b>	STM32F7 (216MHz)	ETH x 1	PCB dim. 70x48x16 mm
<b>Memory</b>	320Kb RAM 64Kb Flash	UART x 1	<b>Power supply</b>
<b>OS</b>	FreeRTOS		DC 5V - 12V
			<b>Environmental</b>
			Operating Temp. -20÷60°C
			Storage Temp. -30÷80°C

