

RSK-PGA-1251 GATEWAY



Our RSK-PGA-1251 gateway is a RISC-based industrial communication gateway. It has Cortex A8 processor, up to four RS-232/485 isolated serial ports, two 10/100 Ethernet ports and operating temperature range of -40~70°C

RSK-PGA-1251 protocol gateway is specially designed to ensure easy integration with Intelligent Electronic Devices (IEDs), PLC/PACs and SCADA control system. RSK-PGA-1251 protocol gateway supports all Important Protocol in SAS or Smart Grid System including MODBUS RTU/TCP, IEC61850, IEC-60870-5-101/103/104, DLMS, DNP3, MQTT and OPC UA, etc.

SPECIFICATIONS	
CPU	Cortex-A8, 800MHz
Memory	DDR3L 256MB
Storage	256MB
Data Storage	SD card slot expandable up to 4GB
Communication Interface	2 x RJ45 Ethernet (IPv4/IPv6)
	4 x RS-232/485 Isolation 3000 VDC (Screw Terminal)
	Serial Port Speed RS-232/RS-485: 50 ~ 115.2 kbps
	1 x USB 2.0 Host
Wireless Connectivity	LTE/3G/2G(Optional) via mPCIe
	WLAN(Wi-Fi)/Bluetooth (Optional) via mPCIe
Display Interface	Indicators LEDs for Power, LAN (LINK, ACT), Serial (Tx, Rx)
SIM Holder	1 x Nano SIM Slots
Watchdog	Yes
Real-time clock	Yes
Node ID	8-bit
Software	RT-Linux 3.12
Programming	Linux C
Operating Temperature	-40~70°C
Storage Temperature	-40~85°C
Humidity	5 ~ 95% (non-condensing)
Power Input	10-30VDC
Power consumption	2.4W @ 24VDC (typical)
Installation	DIN-rail mounting, Wall Mount
Certification	CE/FCC Class A

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The gateway enables a SCADA control system on IEC104, IEC61850 or OPC UA to collect, monitor, trend and control real-time data from the process level such as relays and switch gears on a Modbus RTU/TCP, IEC101, IEC61850 or DNP3. IOT protocols like MQTT are also supported.

Our configuration utility is User Friendly and users can easily configure protocols mapping through interface software for all supported protocols, It also uses IED configuration files in ICD or CID Format to import complex IEC 61850 data structures and same for other Intelligent device libraries.

UTILITY PROTOCOL STACKS

- IEC-61850
- IEC-60870-5-101
- IEC-60870-5-103
- IEC-60870-5-104
- DNP 3.0 (Serial/ TCP)
- MODBUS RTU/TCP
- OPC DA
- OPC UA
- DLMS
- MQTT



SOFTWARE FEATURES

Configuration Software RSK-PGA	<ul style="list-style-type: none"> • Mapping is possible for all protocols from single interface
Diagnostics	<ul style="list-style-type: none"> • Many-to-Many , Many-to-One, On- to-Many protocol conversion is possible. • Diagnostics for Modbus TCP/IP, Modbus RTU ,IEC-104, IEC-103, IEC-101, DNP 3.0 ,DLMS and IEC 61850 networks are available via the configuration utility.
Import Configured IED files	<ul style="list-style-type: none"> • All IED data attributes are available for convenient mapping to other protocol registers.
Modbus TCP/IP Client/Server support	<ul style="list-style-type: none"> • Enables multiple Modbus TCP/IP devices or SCADA devices to interface with IEC 61850 devices simultaneously.
IEC61850 Client/Server support	<ul style="list-style-type: none"> • Enables multiple IED devices or SCADA devices to interface with different protocol devices simultaneously.
IEC-104 Client/Server support	<ul style="list-style-type: none"> • Enables multiple IEC-104 devices or SCADA devices to interface with IEC 61850 devices simultaneously.
IEC-101 Client/Server support	<ul style="list-style-type: none"> • Enables multiple IEC-101 devices or SCADA devices to interface with different protocol devices simultaneously.

Ordering information

Serial No	Part Number	Description
1	RSK-PGA-104-MQTT	RSK-PGA 1251 for IEC 60870-5-104 to MQTT
2	RSK-PGA-61850-MQTT	RSK-PGA 1251 for IEC 61850 to MQTT
3	RSK-PGA-MSC-MQTT	RSK-PGA 1251 for Modbus to MQTT

