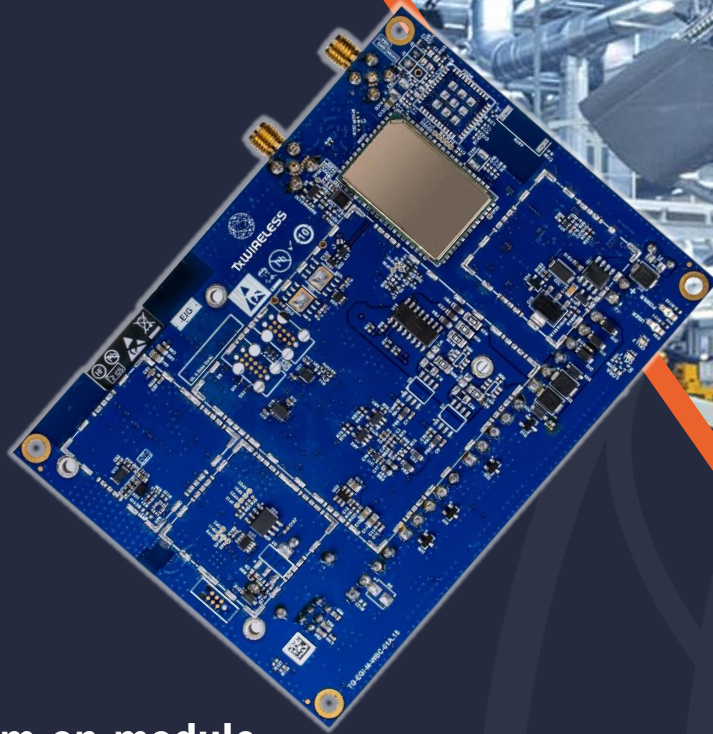




TxWIRELESS™



Datasheet

IG25 system-on-module

Part No:
IG25

Description:

Compact Multi Sensor connectivity system-on-module.

Ordering Information:

IG25L – IG25 SoM [LTE CAT 1 Global module].

IG25B – IG25 SoM [LTE CAT M Global module].

Features:

- Small Form Factor.
- Ultra-low power consumption.
- Secure architecture.
- Cost-effective end-to-end system-on-module with cellular 4G, GNSS, Wi-Fi, Bluetooth, and on-board movement sensors.
- Plug-and-play with fast-time-to value for a variety of Industrial IoT applications.
- Device, data, SIM, and sensor management via EDGE Insights platform.
- Secure provisioning and certificate management.
- Over The Air (OTA) firmware updates and device diagnostics.
- Deployment lifecycle control.

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Introduction

The TxWireless IG25 is an industrial multi-sensor Industrial SoM with cellular, Wi-Fi, Bluetooth and GNSS, Modbus and CANbus connectivity with ultra-low power consumption in a small form factor. It features a dual core processor, optimized firmware/OS RTOS, validated applications libraries (Real Time Performance) and comes with an advanced on-board analytics engine. The IG25 offers the ultimate degree of flexibility and scalability while saving costs and time-to-market for OEMs and enterprises. Developed by industry experts and with proven commercial solutions across healthcare, industrial, transportation, agriculture,

and smart city applications, you can be up and running with the IG25 pre-certified SoM in minutes.

Key Benefits



Integrate Into Your Design

Customizable OEM boards.



Accelerate Your Project

Build your IoT prototype in minutes for rapid prototyping.



Multi Connectivity

Multi-sensor and wireless connectivity.



Flexibility

Highly flexible design (HW/SW)



Ready Out Of The Box

Data ready out of the box.

Specifications

Model Name	IG25
Processor	RISC-V CPU
System Firmware/OS	RTOS + applications libraries (Real time performance)
System Security	Cloud mutual authentication hardware root of trust secure key storage

Cellular modems	LTE Cat. 1 Global module (PLS63). LTE Cat. M Global module (EXS82)
GNSS	Integrated with Cellular modem. GPS/Galileo/BeiDou/GLONASS
Wi-Fi	ESP32-S3-WROOM-1. Wi-Fi (802.11 b/g/n)
Bluetooth	ESP32-S3-WROOM-1. Standard BLE 4.2
Interface	RS485. CAN bus. RS232
Input/output controllers	Digital Inputs x2. Digital Outputs x2. Analog Inputs x2
Connectors	Wurth Elektronik 3631 pluggable terminal block
LED connection indicators	Main power/Battery/Cellular/Device
Operation Temperature	-20°C (-4°F) to +60°C (140°F)
Input Power Voltage	24V DC (min: 12V – max: 36 V)
Current	1A (2A peak)
Physical Dimensions	145 x 90 x 42mm
Battery (available on request)	Internal rechargeable 4000mAHr Li-ion Poly

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