



**TxWIRELESS™**



# Datasheet

## EC55 system-on-module

**Part No:**  
EC55

### Description:

Instant connectivity multi-sensor system-on-module.

### Ordering Information:

**EC55L – EC55 SoM [LTE CAT 1 Global module].**

**EC55B – EC55 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 EC55 is a proven System-on-Module (SoM) with environmental and movement sensors, cellular, Bluetooth and Wi-Fi connectivity which offer 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 EC55 pre-certified SoM in minutes and the IoT design process can literally become as simple as activating a SIM card.

## 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	EC55
Processor	ARM Cortex M7
RAM	384 KB
Flash	2048 KB
Firmware O/S	RTOS Applications Libraries (Real Time Performance)

Security	Cloud Mutual authentication, Hardware root for trust, secure key storage
Cellular	Various options available (LTE EMEA with 2G fallback, Global NB-IoT and CatM, Global NB-IoT and CatM)
GNSS	GPS/GLONASS/Galileo/BeiDou (Via GNSS expansion pack)
Bluetooth	BLE 4.2
On-board sensors	Temperature, Humidity, Light, Atmospheric pressure, Accelerometer, Gyroscope & Magnetometer
Operating Temperature	-20°C (-4°F) to +60°C (140°F)
Dimensions	94 x 50mm
Power	3.2v – 4.5v, Current 2A- 3A
Battery (available on request)	1200 mAh rechargeable Lithium-ion or Li-ion battery

## Regional Support and International Engineering

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### Ireland

DCU Alpha Innovation Campus,  
Old Finglas Road,  
Glasnevin, Dublin 11,  
D11 KXN4  
Ireland

email:  
[sales@txwireless.com](mailto:sales@txwireless.com)  
[support@txwireless.com](mailto:support@txwireless.com)  
Phone +353 1 5241401

### Poland

TxWireless Poland,  
Sp. z o.o. Budowlanych 68B,  
80-298,  
Gdańsk (second floor)

email:  
[sales@txwireless.com](mailto:sales@txwireless.com)  
[support@txwireless.com](mailto:support@txwireless.com)  
Phone: +48 58 670 48 42

### USA

15 S. 5th St. Suite 150,  
Minneapolis,  
MN 55402  
USA

Email:  
[sales@txwireless.com](mailto:sales@txwireless.com)  
[support@txwireless.com](mailto:support@txwireless.com)  
Phone: +1 651 448 7343 or Toll Free: +1 877 435 5831

