DATASHEET ELC.10 - EDGE IoT

Starter Kit

with High Precision



Build a cloud-powered IoT application in minutes with the Taoglas® precertified **EDGE IoT Starter Kit**

Industry's most comprehensive IoT Starter kit including cellular, Bluetooth, on-board sensors, multiband GNSS and RTK, and cloud based management platform.

The Taoglas EDGE IoT Starter Kit is preconfigured with an active cellular data plan.



- High precision GNSS with RTK capabilities allows for gathering of high
 precision positioning data in minutesIntegrated onboard sensors such
 as temperature, humidity, accelerometer, gyroscope, magnetometer,
 light and air pressure
- Cellular support for LTE, 3G, 2G, Cat-M, NB-IoT to give a global coverage footprint
- Contains rechargeable battery with multi year battery performance
- Predictive insights that drive optimization and new revenue opportunities
- Built with EDGE Insights cloud-based enterprise-level software platform with network, sensor, security and data management
- Completely cloud configurable EDGE hardware (no need to change device firmware)
- Easy 3rd party sensor and machine interfacing and integration through server side Sensor Management System
- Over-The-Air (OTA) updates and device diagnostics
- Supported by a full IoT security stack, power, device management and Data-as-a-Service out of the box
- Includes 1 month of EDGE Insights[™] and cellular data subscription*

Key Benefits

- Can help you build your IoT prototype in minutes
- OEM boards inside can be customized and purchased separately for new product introductions
- Reduce the cost and complexity of introducing IoT strategies into enterprises avoiding lengthy design, development, integration, testing, data services and customization spend with fast time-to-value
- Provides real-time sensor and positioning data and can enable real-time intelligence from the EDGE instantly

Typical Applications

























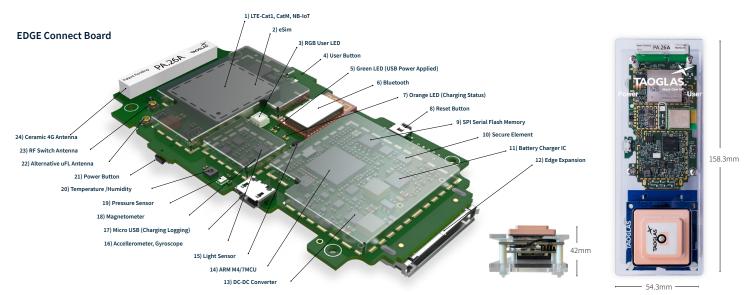
^{*} Includes 1 month subscription of HxGN SmartNet



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PRODUCT SPECIFICATIONS		ELC.10B	ELC.10L
System	Processor	ARM Cortex M7 (300MHz)	
	RAM	384 KB	
	Flash	2048 KB	
	Firmware/OS	RTOS + Applications Libraries (Real Time Performance)	
	Security	Cloud Mutual authentication, hardware root of trust, secure key storage	
Radios	Cellular	LTE US with 3G fallback	LTE EMEA with 2G fallback
	Cellular Bands	4G (B2, B4, B5, B17) 3G (B2, B5)	4G (B3, B8, B20) 2G (900, 1800MHz)
	Carrier Acceptance	Vodafone acceptance, other carriers to follow	
	GNSS, RTK	GPS/GLONASS/Galileo/BEIDOU (Optional RTK)	
	Bluetooth	BLE 4.2	
On-board sensors	Temperature	Range: -40 to 125 °C Accuracy: ±0.3 °C (Standard), ±0.2 °C (High-End Version)	
	Humidity	Range: -40 (-104°F) to 125 °C (257°F) Accuracy: ±0.3 °C (32.5°F) (Standard), ±0.2 °C (32.3°F) (High-End Version)	
	Light	Range: 0.045-188,000 Lux	
	Atmospheric Pressure	Range: 300 1100 hPa Accuracy: typ. ±1 hPa	
	Accelerometer	Range: up to ± 16 g Accuracy: up to 16384 LSB/g with 16 bit resolution	
	Gyroscope	Range: up to 2000°/s Accuracy: up to 262.4 LSB/°/s with 16 bit resolution	
	Magnetometer	Range: ±1300μT (x, y-axis), ±2500μT (z-axis) Accuracy: ~0.3μT	
Expansion	External Connector	RS485, CAN, UART, GPIO, PWM, ADC, I2C, SPI	
Physical	Operating temperature	-20°C (-4F) to +60°C (140F)	
Power		Voltage: 3.2V – 4.5V, Current 2A- 3A	
Battery		2400 mAh rechargeable lithium battery Charging temperature 0°C (32F) to +45°C (113F)	
EDGE Insights and Data Plan		Includes 1-month EDGE Insights subscription and cellular data plan*	

 $^{^{\}star}$ Includes 1 month subscription of HxGN SmartNet



Dimensions: 158.3*54.3*42mm

Weight: 200g

For further details go to ${\color{blue} \textbf{www.taoglas.com/product/taoglas-edge-iot-starter-kit}} \\$