# DATASHEET EC.20 - EDGE™ Connect Instant IoT





The Taoglas **EDGE™ Connect** enables real-time insights and intelligence to help your enterprise save costs, increase revenue and enhance compliance. Next-generation IoT device with cellular, Bluetooth and on-board sensor capabilities with a cloud based connectivity and device management platform.

Your fastest time-to-market for a vast variety of IoT applications

#### **Key Benefits**

- Reduce the cost and complexity of introducing IoT strategies by avoiding lengthy design, engineering, installation, activation, device management, services and customization
- The EDGE<sup>™</sup> Connect provides real-time sensor and positioning data (optional accessory) and can enable intelligence from the EDGE instantly
- Optional GNSS expansion board for location services
- Works anywhere with cellular connectivity
- Global coverage for LTE and NB-IoT
- Includes EDGE Insights<sup>™</sup> cloud-based software platform, providing a scalable out of-the-box solution for easy control, activation, maintenance and secure management
- Completely cloud configurable EDGE hardware
- 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
- SIM management and optional subscription plans
- Easy 3rd party sensor/actuator expansion interface

### **Key Features**

- Pre-certified
- · Low-power
- · High performance
- Secure architecture

#### **Typical Applications**



















## DATASHEET EC.20 - EDGE™ Connect

PRODUCT SPECIFICATIONS		EC.20B	EC.20L	EC.20N
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	Global NB-IoT and CatM
	Frequency Bands	<b>4G</b> (B2, B4, B5, B17) <b>3G</b> (B2, B5)	<b>4G</b> (B3, B8, B20) <b>2G</b> (900, 1800MHz)	B1, B2, B3, B4, B5, B8, B9, B10, B12, B13, B14,
				B17, B18, B19, B20, B25, B26, B27, B28, B66
	Carrier acceptance	Vodafone acceptance, other carriers to follow		
	GNSS	GPS/GLONASS/Galileo/BeiDou (use external antenna)		
	Bluetooth	BLE 4.2		
Expansion Options		GNSS		
On-board sensors	Temperature	Range: -40°C (-104°F) to 125°C (257°F) Accuracy: $\pm 0.3$ °C (32.5°F) (Standard), $\pm 0.2$ °C (32.3°F) (High-End Version)		
	Humidity	Range: 0 to 100%RH Accuracy: $\pm$ 3% RH (Standard), $\pm$ 1.5% RH (High-End Version)		
	Light	Range: 0.045-188,000 Lux		
	Atmospheric pressure	Range: 300 1100 hPa Accuracy: typ. ±1 hPa		
	Accelerometer	Range: up to $\pm$ 16g 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 (-4°F) to +60°C (140°F)		
Dimensions		110.5*56*20mm (134*56*20mm with optional GNSS Expansion Module)		
Weight		93g (107g with optional GNSS Expansion Module)		
Power		Voltage: 3.2V – 4.5V, Current 2A- 3A (CatM/NB-IoT EC.10N - 4.35V)		
Battery		1200 mAh rechargeable lithium battery Charging temperature 0°C (32°F) to +45°C (113°F)		
EDGE Insights™ and data plan		Includes 1-month EDGE Insights™ subscription and cellular data plan		



For further details visit taoglas.com/product/edge-connect