

DATASHEET

EC40 - 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

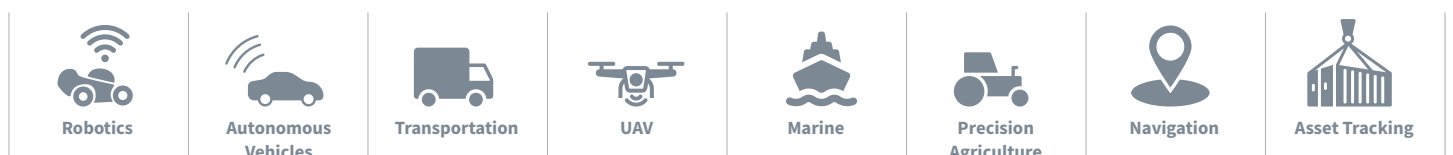
Key Benefits

- Reduce the cost and complexity of introducing IoT strategies by avoiding lengthy design, engineering, installation, activation, device management, services and customization
- The **EDGE™ 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™** 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





TAOGLAS®

DATASHEET

EC40 - EDGE™ Connect

| PRODUCT SPECIFICATIONS | | EC40B | EC40L | EC40N |
|------------------------------|-----------------------|---|--|--|
| 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 CAT-M |
| | Frequency Bands | 4G (B2, B4, B5, B17) 3G (B2, B5) | 4G (B3, B8, B20) 2G (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: ±0.3°C (32.5°F) (Standard), ±0.2°C (32.3°F) (High-End Version) | | |
| | Humidity | Range: 0 to 100%RH Accuracy: ± 3% RH (Standard), ± 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 ± 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 | | |
| Expansion | Magnetometer | Range: ±1300μT (x, y-axis), ±2500μT (z-axis) Accuracy: ~0.3μT | | |
| | 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 (CAT-M/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 | | |

