



- Automotive Grade (E-Mark, SAE/J1455)
- Internal LTE Cat 1 (NA, EU, JP)
- Rugged
- Internal UPS
- ARM® Powered
- Open Platform
- Customizable



Features

- Automotive Grade** - E-Mark and SAE/J1455 certifications, GPS with Dead Reckoning, 6-32V power supply with ignition sense, surge, noise, reverse polarity, overvoltage and short protection
- Internal LTE Cat 1 (NA, EU, JP)** - Carrier certified LTE Cat 1 cellular modem with European, North American and Japanese variants, ready for immediate deployment
- Rugged** - IP67 ingress protection with rugged connectors, wide operating temperature range and a sturdy metal enclosure
- Internal UPS** - Includes a rechargeable internal 2000mA/h UPS to provide up to 5 minutes of operation and safe shutdown
- ARM Powered** - Powered by NXP i.MX 6UltraLite CPU to deliver performance and power efficiency
- Open Platform** - Featuring Everyware Software Framework (ESF), the IoT Java/OSGi based-middleware for IoT Edge Gateways that accelerates gateway development and enables remote management
- Customizable** - Personalization and full customization options are available, ranging from branding ("skins" and color) to deep HW/SW configurations

Description

The DynaGATE 10-06 is a Multi-service IoT Edge Gateway that has been designed to deliver LTE connectivity with 2/3G fallback to automotive and lightly rugged applications.

Based on the NXP i.MX 6UltraLite Cortex-A7 processor family, with 512MB of RAM, 4GB of eMMC and a user-accessible microSD slot, the DynaGATE 10-06 is a low power gateway suitable for demanding use cases: it supports a 6 to 36V power supply with protections and vehicle ignition sense, two protected RS-232/RS-485 serial ports, two CAN bus interfaces, one noise and surge protected USB ports, and two protected digital interfaces.

The DynaGATE 10-06 features a wide range of connectivity capabilities: it integrates an internal LTE Cat 1 cellular modem with dual Micro-SIM support, Wi-Fi, Bluetooth Low Energy, a dedicated GPS with Dead Reckoning and two Fast Ethernet ports.

A rechargeable internal 2000mA/h battery provides uninterrupted operation for up to 5 minutes in the event of power failure and permits a safe shutdown.

The unit complies with popular automotive certifications, such as E-Mark, SAE/J1455 ensuring reliable operation even in the harshest conditions with IP67 ingress protection, wide operating temperature range and rugged connectors (AMPSEAL and M12).

The DynaGATE 10-06 comes with the [Everyware Software Framework \(ESF\)](#), a commercial, enterprise ready edition of Eclipse Kura, the open source Java/OSGi middleware for IoT Edge Gateways.

Distributed and supported by Eurotech, ESF adds advanced security, diagnostics, provisioning, remote access and full integration with [Everyware Cloud \(EC\)](#), [Eurotech IoT Integration Platform](#) (separately available).

Ordering code: DYGATE-10-06-XX

| XX | | - 31 | - 32 | - 33 | - 34 | - 35 | - 36 | - 37 | |
|-------------------------|---------------------|--|--|--------------------------------|-------------------------------------|-------------------------------|-------------------------------|------------------------|--|
| PROCESSOR | CPU | i.MX 6Ultralite, 696MHz, Single Core | | | | | | | |
| MEMORY | RAM | 512MB DDR3L | | | | | | | |
| STORAGE | Embedded | 4GB eMMC | | | | | | | |
| | Other | 1x microSD Slot (User Accessible) | | | | | | | |
| I/O INTERFACES | Ethernet | 2x 10/100Mbps on M12 | | | | | | | |
| | USB | 1x Host 2.0 (Noise and Surge Protected) - Type A (User Accessible) | | | | | | | |
| | Serial | 1x RS-232, 1x RS-485 (Three-wire, Non-isolated, Surge Protected, RS-485 Termination and Fail-safe Resistors) – 1x Serial Console TTL (User Accessible) | | | | | | | |
| | CAN 2.0B | 2x CAN bus (Non-isolated) | | | | | | | |
| | Digital I/O | 1x Ignition Key (Surge Protected), 1x Odometer (Surge Protected) | | | | | | | |
| RADIO INTERFACES | Cellular | No | | | LTE Cat 1 (NA) | LTE Cat 1 (NA) 3G Fallback | LTE Cat 1 (EU) 2G Fallback | LTE Cat 1 (JP) | |
| | GPS | No | 72 channels (GPS, Galileo, GLONASS, BeiDou), with Dead Reckoning | | | | | | |
| | Wi-Fi / BLE | No | | | a/b/g/n, BLE 4.2 | | | | |
| | Antennas (External) | No | 1x SMA GPS | 1x SMA GPS, 2x RP-SMA Wi-Fi/BT | 3x SMA Cell/GPS, 2x RP-SMA Wi-Fi/BT | | | | |
| OTHER | UPS | No | Internal Battery: 2000mA/h, Ni-MH (Factory Option: Li-ion) | | | | | | |
| | RTC | Yes (Supercap) | | | | | | | |
| | Watchdog | Yes - Dedicated Chip | | | | | | | |
| | EEPROM | 256kbit | | | | | | | |
| | TPM | TPM 2.0 | | | | | | | |
| | Sensors | Temperature, Accelerometer | | | | | | | |
| | LEDs | 1x Power, 1x Cellular, 2x Programmable | | | | | | | |
| | SIM Slot | No | | | 2x Micro-SIM (User Accessible) | | | | |
| POWER | Input | 6-36VDC, with Surge, Noise, Reverse Polarity, Overvoltage and Short Protection, Vehicle Ignition Sense – Factory Option: Load Dump | | | | | | | |
| ENVIRONMENT | Operating Temp | - 40 to +85 °C | | | | | | | |
| | Storage Temp | - 40 to +85 °C | | | | | | | |
| CERTIFICATIONS | Regulatory | FCC, ISED, CE, TELEC/JATE, VCCI | | | | FCC, ISED | CE | TELEC/JATE, VCCI | |
| | Safety | EN 62368, UL 60950 (§) | | | | | | | |
| | Vertical | E-Mark, SAE/J1455 | | | | | | | |
| | Environmental | RoHS2, REACH | | | | | | | |
| | Wi-Fi / BT Radio | No | | FCC, ISED, CE (RED) | FCC, ISED | | CE (RED) | TELEC/JATE | |
| | Cellular Radio | No | | | FCC, ISED, PTCRB, Verizon | FCC, ISED, PTCRB, AT&T | CE (RED) | TELEC/JATE, NTT DoCoMo | |
| | IoT Platform | Microsoft Azure Certified | | | | | | | |
| | Ingress | IP67 | | | | | | | |
| MECHANICAL | Enclosure | Aluminum | | | | | | | |
| | Dimensions | 178x183x62mm (WxDxH) - With Mounting Flange and Connectors | | | | | | | |

Software

| | | |
|-----------------|---------------|--|
| SOFTWARE | OS | Eurotech Everyware Linux |
| | IoT Framework | Everyware Software Framework (Java/OSGi) |

(§) UL, NRTL listing Factory Option.

