



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

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 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 port, 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, and optionally SAE/J1455 ensuring reliable operation even in the harshest conditions with IP67 ingress protection, wide operating temperature range and rugged connectors (AMPSEAL and M12).

Ordering code: DYGATE-10-06-XX

| XX | | - 21 | - 22 | - 23 | - 24 | - 25 | - 26 | - 27 | |
|-------------------------|---------------------|--|--|--------------------------------|-------------------------------------|-------------------------------|-------------------------------|----------------|--|
| 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), 1x Host 2.0 OTG (Noise and Surge Protected) - Micro AB (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 Input, Surge Protected, 1x Isolated Digital Input, 1x Isolated Digital Output, 1x Odometer Input, 1x Isolate Forward Input | | | | | | | |
| 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: 2000mAh, 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, JATE/TELEC | | | FCC, ISED | | CE | JATE/TELEC | |
| | Safety | EN 62368, UL 60950 (§) | | | | | | | |
| | Vertical | E-Mark, SAE/J1455 (*) | | | | | | | |
| | Environmental | RoHS3, REACH | | | | | | | |
| | Wi-Fi / BT Radio | No | | FCC, ISED, CE (RED) | FCC, ISED | | CE (RED) | JATE/TELEC | |
| | Cellular Radio | No | | | FCC, ISED, PTCRB, Verizon | FCC, ISED, PTCRB, AT&T | CE (RED) | JATE/TELEC | |
| | Ingress | IP67 | | | | | | | |
| MECHANICAL | Enclosure | Aluminum | | | | | | | |
| | Dimensions | 178x183x62mm (WxDxH) - With Mounting Flange and Connectors | | | | | | | |

Software

| | | |
|-----------------|----|---------------------------|
| SOFTWARE | OS | Eurotech Everywhere Linux |
|-----------------|----|---------------------------|

(§) UL, NRTL listing Factory Option.

* Factory Option

Note: The information in this document is subject to change without notice and should not be construed as a commitment by EUROTECH. While reasonable precautions have been taken, EUROTECH assumes no responsibility for any error that may appear in this document. All trademarks or registered trademarks are the properties of their respective companies.