DynaGATE 10-06
Automotive Edge Computer - LTE Cat 1 and IP67

EUROTECH

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

EC **ESF**

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						
STORAGE 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		802.11a/b/g/n, BLE 4.2				
Antennas (External)	No	1x SMA GNSS	1x SMA GNSS, 2x RP-SMA Wi-Fi/BT	1x SMA GNSS, 2x SMA Cellular, 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, 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 Everyware Linux

(§) UL, NRTL listing Factory Option.

* Factory Option