



- 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: 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 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.