

HERACLES 324M

Mass production Q3 2020 – Pin to pin compatible with Heracles 224G

HERACLES 324M

HERACLES 324M is an all in one solution, real direct IoT and plug and play. It combines an application processor, a low power, low throughput LTE modem, a GPRS/EDGE modem, a global satellite localization system and a pre-paid data package with an European footprint. It is combined with a hardware secured element allowing a high level of security.

Applications

HERACLES 324M is the third generation of our all in one solution concept and will allow customers to smoothly migrate from the 2G M2M world to the upcoming LPWA LTE world (4G). It is designed for applications that need low latency, medium throughput data communication in a variety of radio propagation conditions. Due to the unique combination of performance, security and flexibility, this module is ideally suited for M2M applications, such as metering, wearable, tracking, remote monitoring, healthcare, telematics, mobile POS terminals, bike sharing, smart farming, etc ...

Connectivity

HERACLES 324M can be ordered with a pre paid data package allowing a free access to European mobile network without monthly fees. 2 flavours are available depending on customers business models and data usage: 50 MB for 5 years or 500 MB for 10 years. The same device can also be ordered with an embedded eSIM (eUICC) allowing the remote provisioning of another operator over the air, without the need to change a plastic SIM card inside a device. A third option is possible; purchasing the pure hardware without connectivity in order to be used with a standard external SIM in cases where offered connectivity is not suitable.



Connectivity

HERACLES 324G embeds a prepaid data package thanks to an embedded sim. The package can be used over 5 years for 50 MB or 10 years for 500 MB starting from the delivery date and includes the connectivity in 33 European countries. Reload is also possible to extend the amount of data or the duration. Connectivity includes the following countries:

Austria	Czech Republic	Greece	Liechtenstein	Poland	Sweden
Andorra	Denmark	Hungary	Lithuania	Portugal	Switzerland
Belgium	Estonia	Iceland	Luxembourg	Romania	United Kingdom
Bulgaria	Finland	Ireland	Malta	Slovakia	
Croatie	France (Metro.)	Italy	Netherlands	Slovenia	
Cyprus	Germany	Latvia	Norway	Spain	

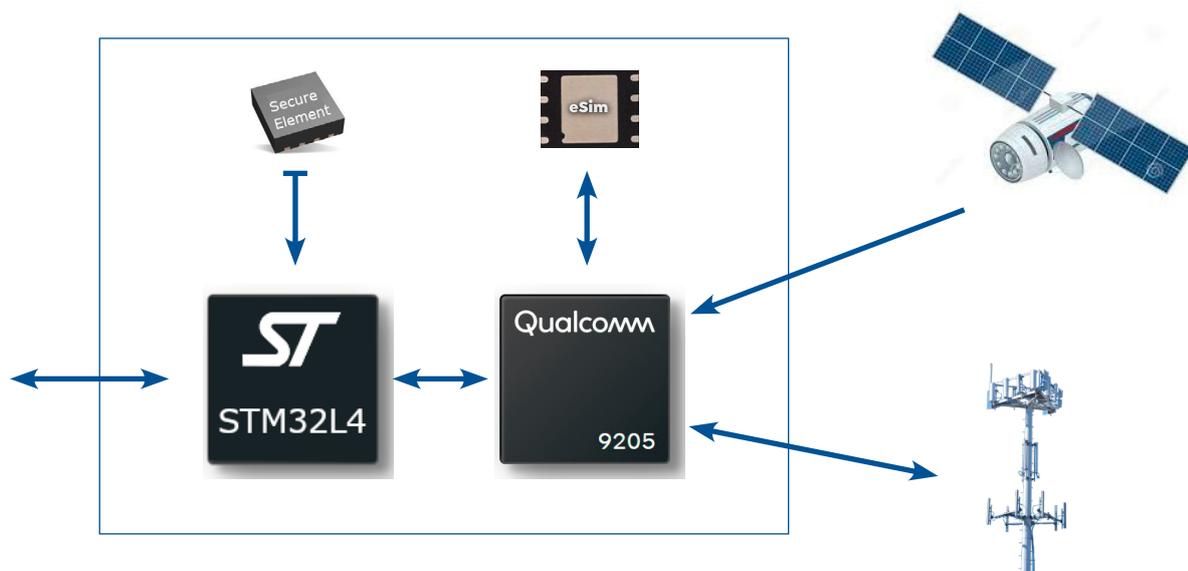
LTE-M

LTE-M connectivity is available or coming soon this year and included within this offer, in countries such as :

Belgium	France	Germany	Netherlands	Romania	Slovakia
Spain	Switzerland	Poland			

New countries will be added step by step and automatically loaded on already deployed products.

HERACLES 324M Block diagram



Hardware

The Qualcomm 9205 chipset is a multi-band, multi-mode solution with extended RF frequency capability from 450 MHz to 2.1 GHz. It supports LTE-M, NB-IoT communication and also 2G/E-GPRS in areas where LTE IoT is not yet deployed. It reduces power consumption by up to 70% in idle mode compared to its predecessor and it is also more cost effective.

Feature list

- **LTE Technology:** Rel.14 LTE Cat-M1, Rel.14 LTE Cat-NB2
- **Cellular Technology:** Rel.12 EGPRS MSC12
- **Protocols:** IPv4/IPv6 stack with TCP and UDP, PPP, SSL, DTSL, FTP, ping, HTTP, MQTT, OMA LW M2M, CoAP
- **Satellite Systems Support:** GPS, GLONASS, Beidou, Galileo
- **LTE low bands:** B5, B8, B12, B13, B14, B17, B18, B19, B20, B26, B27, B28, B31, B71, B72, B73, B85
- **LTE mid bands:** B1, B25, B2, B66, B3, B4 / EGPRS bands: B3, B2, B8, B5
- **Size:** 20 x 24 x 2.6 mm
- **Operating temperature:** -20°C – +80°C
- **Supply Voltage:** 3.0.V – 4.3 V