



Features and Benefits

- **4G LTE and 5G connectivity with speeds up to 1 Gbps download and 400 Mbps upload**

- **Connects to Commercial and Private LTE Networks**

- **Dual SIM**

- **WLAN 802.11a/b/g/n/ac**

- **Bluetooth® 5**

- **Wireless Personal Area Network (WPAN) 802.15.4**

- **Intergrated GNSS, Accelerometer, Gyroscope and Magnetometer**

Rugged Cellular Gateway

The Rugged Cellular Gateway is a simple to use, small form factor, handheld device that provides secure communication via different interfaces backhauled over a private or commercial LTE network.

Devices with WLAN capabilities can be connected to provide a secure transfer of data.

When used with Cubic's Cellular Base Station a private LTE network can be established operating in non 3GPP frequency bands. Using these non-standard frequencies means that interference from existing commercial 3G and 4G systems is mitigated.

If the private LTE network connection is lost, then the Rugged Cellular Gateway will fall back to commercial LTE networks by utilizing the dual SIM functionality of the device.

The unit also has other means of connecting devices and peripherals via infrared, Bluetooth®, Wireless Personal Area Network (WPAN) and/or USB.

Specifications

Cellular Connectivity	
Technology	HSPA (3G), LTE (4G), 5G SA and NSA
3G Bands (HSPA+/WCDMA)	B1, B2, B3, B4, B5, B6, B8, B9, B19
4G Bands	B1, B2, B3, B4, B5, B7, B8, B12, B13, B14, B17, B18, B19, B20, B25, B26, B28, B29, B302, B32, B34, B38, B39, B40, B41, B42, B463, B48, B66, B71
5G Sub-6GHz Bands	n1, n2, n3, n5, n28, n41, n66, n71, n77, n78, n79
Speed	Up to 1 Gbps Download Up to 400 Mbps Upload

Wireless Connectivity	
WLAN	802.11a/b/g/n/ac Single Input Single Output
Bluetooth	Bluetooth® 5
GNSS	GPS, GLONASS, Beidou, Galileo
WPAN	802.15.4

System	
Operating System	Yocto Linux
Processor	i.MX8M Mini
Cores	4
Processor Speed	1.6 GHz
RAM	4 GB
Internal Storage	16 GB eMMC 128Mb SPI Flash 32Kb EEPROM
External Storage	microSD (uses shared SIM slot)
SIM Card Slots	X2 (when no SD card is present)
USB	2.0 OTG
TPM Version	2.0

Sensors & Interaction	
Sensors	Accelerometer, Gyroscope, Magnetometer, Temperature Sensor, Ambient Light Sensor.
Real-Time Clock	Provides Year, Month, Day, Weekday, hours, minutes, seconds and 100th seconds
Haptic Feedback	Licensed Immersion TouchSense® 2200 Features Speed 10000 ±2500 RPM

Electrical	
Battery Voltage	4.2V
Battery Capacity	11800mAh
Standby Time	>24 Hours
Charging Voltage Range	5V
Charging Current	500mA
USB OTG Output Voltage Range	4.5V to 5V
USB OTG Output Current Range	500mA (connector limiting) otherwise 0.5A to 2.45A

Mechanical	
Form Factor	Standalone Enclosure
Cooling	Passive
Operating Temperature Range	-20°C to 45°C ambient
Storage Temperature Range	-40°C to 70°C ambient
Humidity	0 – 95% Relative Humidity (non-condensing)
Solar Radiation	1120W/m2
Shock and Vibration	MIL STD-810G
MTBF	>20,000 hours at 25°C
Ingress Protection Rating	IP67
Dimensions	Height 146mm x Width 90mm x Depth 34mm Height 5.75in x Width 3.54in x Depth 1.33in
Weight	450g / 0.99lbs

Compliance & Certification	
Cellular	ETSI TS136 101 (in commercial frequencies) Pre-compliance for S-Band deviation from the specification.
Safety	IEC62368-1 Edition 2 2014 or later
Electromagnetic Compliance	0EN 301 489
Specific Absorption Rate (SAR)	1EN 50360:2017
Battery	UN38.3, IEC62133

Gateway Components

1. Status LEDs
2. Channel Switch Button
3. Power Switch Button
4. Belt Clip



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Specifications subject to change without notice.