



Pyxis LPWA 5G



About

Pyxis 5G LPWA is a single radio LTE-M router with dual SIM (iSIM + physical SIM) compatible with standard LTE bands, LTE ISM-FDD band, and NTN bands. The router has been built to withstand the elements and brings secure connectivity right to the edge of the grid. Supporting a range of Utility applications such as SCADA, DER and distribution automation, Pyxis 5G LPWA is the ideal endpoint for existing public network, pLTE networks, or Ubiik's freeRAN™ and goRAN™ pLTE systems. With its powerful platform and extensive interfaces, it offers enough power to support computing at the edge and enough interfaces to connect with non-IP equipment, making it the ultimate choice for future proof deployment of private LTE Utility networks.

User Equipments

Integrate your device into IP networks with Pyxis.



Ethernet

Pyxis



- ✓ iSIM
- ✓ Physical SIM

LTE-M

Triple Failover
Flexibility

private LTE



Satellite NTN



All-in-one
Base Station



Public Cellular
Networks

goNMS



Contact Us



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Features

- LTE-M is a 5G LPWA standard tailored for IoT deployments – long range and low power.
- Semtech HL7845 module with Power Class 2 (+26 dBm) for extended coverage range
- Power-Over-Ethernet (PoE) offers flexibility to deploy without the need for an AC adapter
- Compatible with goNMS, Ubiik remote Network Management Solution, it provides end-to-end visibility and management of the whole network through a single web interface, deployed either in the Cloud or on-premises
- Powerful platform built on Qualcomm dual-core ARM process to enable edge computing and bring intelligence at the edge

Specifications

Regions

Worldwide

Cellular Radio

Technology	LTE-M
Peak Downlink (theoretical)	375 Kbps
Peak Uplink (theoretical)	375 Kbps
LTE Category	Cat M1
Radio Module	Semtech HL7810 / 7845
SIM	1x iSIM & 1x nano – 4FF
4G LTE Bands	HL7810 1, 2, 3, 4, 5, 8, 12, 13, 18, 19, 20*, 23, 25, 26, 28, 66, 85, 106, 111, 255, 256, ISM-FDD HL7845 1, 3, 5, 8, 20, 28, 31*, 72*, 73*, 87, 88 * Supports +26 dBm output power
Transmit Power	+23 dBm / +26 dBm

Power

Power input	9-15 VDC Power Over Ethernet (PoE) – IEEE 802.3AF on console port
Power consumption	3.48 W typical (Idle) 5.14 W typical (peak Tx/Rx)

Connectors

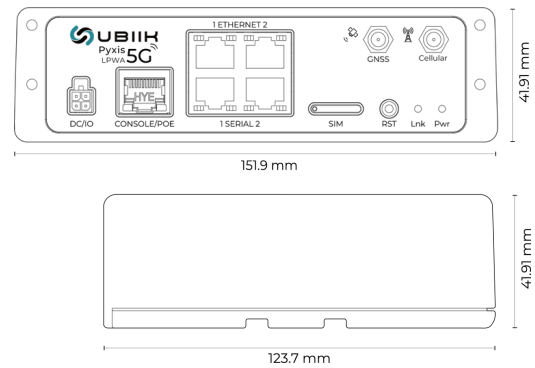
RF Connectors	2x SMA (LTE, GNSS)
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Interfaces

I/O	1 GPIO – 2 pins
Ethernet	2x 1Gbps ports (RJ45)
Serial	2x RS232 / 485 (RJ45)
Console port	1x shared with PoE
LEDs	1x for system power 1x network connection status
Reset button	1x

Management Interfaces

Local management	Web User Interface (HTTP/HTTPS), Command Line Interface -CLI- (SSH)
Remote management (requires separate license)	goNMS SNMP V2/v3
Software update	Support Over-The-Air (OTA) or through local interface



Wireless Certification

Regulatory

FCC/ISED

Platform

Dual-core ARM 64bit A53@1.0GHz processor
8GB eMMC + 512MB DRAM

Dimensions

W x L x H	123.7 x 151.9 x 41.91 (mm) 4.87" x 5.98" x 1.65" (inches)
Weight	0.77 kg / 1.7lbs

Environmental

Operating temperature	-40F to +149 F / -40C to 65C
Storage temperature	-40F to +185 F / -40C to 85C
Relative Humidity	5% to 90% (non-condensing)

Network & Routing

LAN & WAN configuration	DHCP or Static IPs NAT APN VLAN Application Layer Gateway UPnP and NAT-PMP QoS DNS Zero-Touch Provisioning mDNS DNS-SD
Firewall	Port forwarding Traffic rules DoS Prevention DMZ Host One to One NAT
Router Monitoring	GRE tunneling Soft and hard reset Real time graphs Serial ports configuration