microhard

150 Mbps CAT4 LTE IoT Ethernet Gateway with 802.11 WIFI

The LTECubeCAT4 was engineered for the small size, low cost, and power requirements of the IoT & M2M applications that are growing across the globe. The LTECubeCAT4-NA2-WIFI provides robust and reliable CAT4 LTE with speeds up to 150 Mbps. The LTECubeCAT4-NA2-WIFI features 10/100 Ethernet, High Power 802.11 WIFI, USB 2.0, Standalone GPS, and powerful VPN/GRE Tunneling Capabilities.

- **CAT4 - 150 Mbps LTE**
- **802.11 WIFI**
- **High Power WIFI (1W)**
- **10/100 Ethernet**
- **IPv6 & IPv4 Support**
- **USB 2.0 Port**

Only 1.75" x 1.75" x 1.35"!

Features

- USB Powered (5V, 1.5A)
- Fast & Robust CAT4 LTE Operation
- Engineered for IoT Applications
- Low Cost & Low Power Consumption
- Up to 150 Mbps Downlink / 50 Mbps Uplink Over Air
- Enterprise Class WIFI (more than 200 clients!)
- High Power 1W WIFI
- Data Usage & Systems Alerts (Email, SMS)
- Firewall with ACL Security, DMZ & Port Forwarding
- IPSec, GRE / VPN Tunneling
- 10/100 Ethernet w/PoE
- Full IPv6 & IPv4 Support
- MQTT Support
- Wide Operating Temperature (-40°C to +85°C)
- User interface via SSH or HTTP/HTTPS web browser
- Microhard NMS Support

Can be USB powered!

LTECubeCAT4-NA2-WIFI *Specifications*

Supported Bands	LTE FDD: B2,B4,B5,B12,B13,B14,B66,B71 WCDMA: B2,B4,B5
Cellular Data Features*	LTE FDD: Up to 150 Mbps DL, 50 Mbps UL LTE TDD: Up to 130 Mbps DL, 35 Mbps UL DC-HSPA+: Up to 42 Mbps DL, 5.7 Mbps UL WCDMA: Up to 384 Kbps DL, 384 Kbps UL
Module Standalone Laboratory Performance	
Ethernet	10/100, Auto - MDI/X IEEE 802.3
WIFI Features	802.11b/g/n (2.4 GHz)

WiFi Performance

Rate	Mode	Tx (dBm)	Rx (dBm)
1 Mbps	b	30	-97 ± 1
11 Mbps	b	30	-92 ± 1
6 Mbps	g	30	-94 ± 1
54 Mbps	g	26	-75 ± 1
MCS0	n (HT20)	30	-96 ± 1
MCS7	n (HT20)	26	-75 ± 1
MCS0	n (HT40)	30	-94 ± 1
MCS7	n (HT40)	26	-73 ± 1

USB	USB 2.0 USB Tethering
SMS	SMS to/from Ethernet via Telnet SMS Alerts SMS Remote Reboots
Carrier Connection	ICMP Keep Alive, DDNS

GPS — TCP Server, UDP/Email Reporting, GpsGate

Navigation Update Rate		Up to 5 Hz
Accuracy	Position:	2.5 m CEP
	SBAS:	2.0 m CEP
Acquisition	Cold Starts:	27 seconds
	Aided Started:	4 seconds
	Hot Starts:	1 seconds
Sensitivity (Active/Passive Antenna)	Tracking :	-159 dBm
	Cold Starts:	-147 dBm
	Hot Starts:	-156 dBm

Network Protocols	IPv4, IPv6, TCP, UDP, TCP/IP, ARP, ICMP, DHCP, HTTP, SNMP, FTP, DNS, Modbus Slave (TCP), MQTT
Security	VPN, IPSec with IKE/ISAKMP; Multiple tunnel support (16); 3DES and up to 256-bit AES Encryption, Site to Site Tunneling, L2TP, Open VPN), GRE, HTTPS, RADIUS

Firewall	NAT, NAT-T VPN tunneling, Port forwarding, VPN/GRE pass-through; Access control lists (IP/MAC filtering), Data origin / integrity Authentication, DMZ
Management	Telnet, WebUI, SNMP V1/2/3, Wireless Upgrade (HTTP/FTP), RADIUS authentication, AT Command Interface (Telnet), Microhard NMS Support, Data Usage Alerts, SSH
Diagnostics	RSSI, Ec/No, Temperature, Remote diagnostics, Watchdog, UDP Event Reporting, SMS Alerts, Netflow
Input Voltage	5 - 30VDC PoE (Passive, Max 24V) USB Powered (5V, 1.5A)

Connectors:

Antenna	3x SMA Female (Main, Diversity, GPS) 1x RPSMA Female (WIFI)
Data	RJ-45 (Ethernet) 4 PIN Interlock (Vin)
USB	Micro-AB
SIM	Nano (4FF) 1.8 / 3.0V

Environmental

Operating Temperature	-40°C to +85°C -40°F to +185°F
Humidity	5-95%, non-condensing

Weight	Approx. 105 grams
Dimensions	Approx. 1.75" x 1.75" x 1.35" (45mm x 45mm x 35mm)
Approvals	FCC/IC PTCRB RoHS Compliant

Order Options

CA-MHK119455	LTECubeCAT4-NA2-WIFI
MHK119457	LTECubeCAT4-NA2-WIFI-KIT

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