

Product: [OWL LPWAN](#)



LTE Cat. M1/NB-IoT Ethernet Gateway, USA, Canada, VPN, Dual SIM, Serial, IO

Product Description

Industry 4.0 and Industrial IoT Cellular Router and Gateway. Optimized for 4G Low Power WAN applications (LTE Cat. M1 and NB-IoT) with edge pre-computing. VPN and openly programmable and extendable Linux.

Technical Specifications

Product description

Type:	OWL-L05.01-W00.00-F01-U01-A01-VXX.X.XX
Name:	OWL LPWAN
Description:	Industry 4.0 and Industrial IoT Cellular Router and Gateway. Optimized for LTE-M distributed applications with edge pre-computing. VPN and open extendable Linux.
Part Number:	942286001
Availability:	Available for Order
Port type and quantity:	2x Ethernet, 1x Antenna, 2x SIM, 1x Power, 2x I/O, 2x Serial
Country certification:	USA, Canada, (Europe on request)
Processor:	ARMv7
Hard disk space:	Flash memory (512MB User data storage, 830MB User module storage)
RAM:	512MB

More Interfaces

Serial:	On 10-pin panel socket (connector included): RS485, RS232, Serial2TCP, Serial2UDP
Ethernet:	2x Ethernet: 10/100 Mbit/s (RJ45)
Power Supply:	Via 2-pin terminal block 3.5mm (included)
Signaling contact:	On 10-pin panel socket (connector included): Digital Input, Digital Output

Radio technology

Antenna connector:	1 x SMA Female (Cellular)
Frequency band:	GPRS/EDGE (2G): 850/900/1800/1900 MHz, LTE 4G Cat. M1 and NB-IoT: 700(Bands 12,13,28) / 800(Band 20) / 850(Bands 5,18,19,26) / 900(Band 8) / 1700(Band 4) / 1800(Band 3) / 1900(Bands 2,39) / 2100(Band 1) MHz
Transmission rate:	LTE Category M1: 375 Kbps Upload and Download

Power requirements

Current consumption:	Idle 2.5 W, Average 4 W, Maximum 11 W
Operating Voltage:	9 V DC to 36 V DC
Redundancy functions:	Dual VRRPv2 (with ping probes), Dual VRRPv3 (with ping probes), multiple routed interfaces (ping monitoring, failover and load balancing), PPPoE bridge mode

Diagnostics features

Monitoring:	Syslog (UDP), SNMPv1/2c/3
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Security features

Authentication:	User Management (local, RADIUS, TACACS+, mixed)
Stateful inspection firewall:	Static Firewall IPv4/IPv6 with Incoming and Forwarding Ruleset, DoS protection

Service

Other services:	DHCP Server (IPv4/IPv6, dynamic and static leases, IPv6 Prefix Delegation, DNS proxy) , DynDNS client , PPPoE , FTP server , E-Mail via SMTP , SMS (notifications and commands) , Telnet server
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Software

Operating system:	Custom embedded Linux with Busybox Shell
VPN:	OpenVPN, IPSec, GRE, L2TP, PPTP
Switching:	VLAN (via Scripting), tunneled VLANs (via Scripting) , IGMP
Management:	HTML5, SSH, SNMPv1/2c/3, Automatic configuration and firmware fetch from a web- or ftpserver, backup and restore with drag & drop
Diagnostics:	One click support report package, System log, Linux kernel log, reboot log, signal strength history (60 days), SSH linux shell, Signal strength LED indicators
Configuration:	Simple to edit text file configuration, HTTP, HTTPs, SMS, SSH, Telnet, 4 Configuration Profiles, automatic via web/ftp, SNMPv1/2c/3
Security:	HTTPs, SSH, Authentication with RADIUS or TACACS+, activate cellular interface with SMS, Ethernet 802.1X (EAP-PEAP/MsCHAPv2 or EAP-TLS)
Time synchronisation:	SNTP Client, SNTP Server , Battery for RTC (CR1225)
Routing:	Static unicast routing, Multinetting, IP masquerading, Port forwarding, Multiple routes with priority and load sharing, 1:1 NAT
Dynamic routing:	Dual VRRPv2 (with ping probes), Dual VRRPv3 (with ping probes), multiple routed interfaces (ping monitoring, failover and load balancing)

Ambient conditions

MTBF (MIL-HDBK-217F-2, parts count):	53.3 Years
Degree of Protection when Installed:	IP30
Operating temperature:	-40-+65 °C
Storage/transport temperature:	-40-+85 °C
Relative humidity (non-condensing):	0-95 %

Mechanical construction

Housing:	Metal
Mounting:	DIN Rail and Wall mounting
Protection class:	IP30

Approvals

Safety of industrial control equipment:	EN 60950-1
Transportation:	EN 45545-1 (fire) , EN 45545-2 HL1/HL2/HL3
Radio:	PTCRB, AT&T, Verizon, FCC CFR-47:2017 Part 15 Subpart B Class A, FCC CFR-47:2016 Part 22 Subpart H, FCC CFR-47:2016 Part 24 Subpart E

Scope of delivery and accessories

Modules and components:	User modules as separate download: Lua, Python
Accessories:	942042105 Indoor LTE Antenna , 943662015 Rail Power Supply
Scope of delivery:	Device, DIN rail clip, wall mount wings, 2-pin power connector, 10-pin connector for I/O and RS232/RS485

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