

**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
Port type and quantity:	2x Ethernet, 1x Antenna, 2x SIM, 1x Power, 2x I/O, 2x Serial
Serial:	On 10-pin panel socket (connector included): RS485, RS232, Serial2TCP, Serial2UDP
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**

SIM Cards:	2x 2FF (3V, 1.8V), only one active at a time, can be configured independently, automatic switch on connection failure
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**

Modules and components:	User modules as separate download: Lua, Python, NodeRED
Monitoring:	Syslog (UDP), SNMPv1/2c/3

**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

Dimensions (WxHxD):	145x32x105 mm
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

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

## Further Instructions

Product Documentation:	<a href="https://www.doc.hirschmann.com">https://www.doc.hirschmann.com</a>
Certificates:	<a href="https://www.doc.hirschmann.com/certificates.html">https://www.doc.hirschmann.com/certificates.html</a>

## Variants

Item #	Type
942286001	OWL-L05.01-W00.00-F01-U01-A01-VXX.X.XX

Update and Revision:	Revision Number: 0.52 Revision Date: 11-22-2021
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