

Product: [OWL 4G North America + WLAN](#) 

LTE Ethernet Gateway, USA, Canada, WLAN, VPN, GPS, Dual SIM, Serial, IO, Vehicles (E-Mark)



Product Description

Industry 4.0 and Industrial IoT Cellular Router and Gateway. Optimized for 4G applications with edge pre-computing. 11ac Wave 2 WLAN, GPS, VPN and openly programmable and extendable Linux. Rugged and approved for vehicles.

Technical Specifications

Product description

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| Type: | OWL-L02.01-W02.01-F02-U01-A02-VXX.X.XX |
| Name: | OWL 4G North America + WLAN |
| Description: | Industry 4.0 and Industrial IoT Cellular Router and Gateway. Optimized for 4G distributed applications with edge pre-computing. VPN and open extendable Linux. Integrated WLAN 802.11ac. |
| Part Number: | 942284101 |
| Availability: | Available |
| Port type and quantity: | 2x Ethernet, 2x Antenna, 1x GPS, 2x SIM, 1x Power, 2x I/O, 2x Serial, 2x WLAN |
| Serial: | On 10-pin panel socket (connector included): RS485, RS232, Serial2TCP, Serial2UDP |
| Radio protocol: | IEEE 802.11ac Wave 2 (2x2 MIMO), 802.11d, 802.11e, 802.11h, 802.11i, 802.11r |
| Country certification: | USA, Canada |
| Processor: | ARMv7 |
| Hard disk space: | Flash memory (512MB User data storage, 830MB User module storage) |
| RAM: | 512MB |

More Interfaces

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| 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

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| Antenna connector: | 3 x SMA Female (Cellular, Diversity, GPS), 2x RP-SMA Female (WLAN) |
| Frequency band: | WCDMA: 850(Band 5) / 1700(Band 4) / 1900(Band 2) MHz, LTE (4G): 600(Band 71) / 700(Bands 12,13,14) / 850(Band 5) / 1700(Band 4,66) / 1900(Band 2) MHz |
| Transmission rate: | LTE Category 4: 150Mbps Download, 50 Mbps Upload |
| Additional radio features: | GNSS (GPS, GLONASS) |

Power requirements

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| 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

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

Security features

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

Service

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| 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

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| 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), GPS |
| 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

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| MTBF (MIL-HDBK-217F-2, parts count): | 55.2 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

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| Dimensions (WxHxD): | 145x32x105 mm |
| Weight: | 520 g |
| Housing: | Metal |
| Mounting: | DIN Rail and Wall mounting |
| Protection class: | IP30 |

Approvals

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| Safety of industrial control equipment: | UL/EN/AS/NZS 62368-1:2014 (formerly EN 60950-1) |
| Transportation: | E8 (vehicles) , EN 45545-1 (fire) , EN 45545-2 HL1/HL2/HL3 |
| Radio: | PTCRB, AT&T, Verizon (pending), 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 |

WLAN Access Point

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| Access Point Functionality: | Yes, open and secured (WEP, WPA-PSK, WPA-Enterprise, WPA2-PSK, WPA2-Enterprise, 802.1X - Radius with EAP-PEAP/MsCHAPv2 or EAP-TLS), AP and Client function can be used in parallel (only on the same channel, AP channel takes priority) |
| Number of SSIDs: | 1 |
| Max. Number of Connected Clients: | 50 |

WLAN Client

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| Client / STA Functionality: | Yes, open and secured (WEP, WPA-PSK, WPA-Enterprise, WPA2-PSK, WPA2-Enterprise, 802.1X - Radius with EAP-PEAP/MsCHAPv2 or EAP-TLS), AP and Client function can be used in parallel (only on the same channel, AP channel takes priority) |
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Scope of delivery and accessories

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| Accessories: | 942042105 Indoor LTE Antenna , 942042108 Indoor GPS antenna , 942117001 50Ohm terminator for cellular antenna , 943981015 2x2 WLAN Through-hole 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

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| Product Documentation: | https://www.doc.hirschmann.com |
| Certificates: | https://www.doc.hirschmann.com/certificates.html |

Variants

| Item # | Type |
|-----------|--|
| 942284101 | OWL-L02.01-W02.01-F02-U01-A02-VXX.X.XX |

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