

Product Bulletin

PB00037HE

OWL 3G Industrial Cellular Router

New single box solution for routing and security provides secure and reliable remote access in an increasingly connected world.



The OWL 3G Industrial Cellular Router offers increased routing functionalities and advanced security capabilities in a single, reliable product. Its Web interface supports a rich set of configurations and the enhanced software technologies make it easy to customize.

- Optimal network performance –
 redundancy provided by dual SIM cards and
 two Ethernet ports guarantees the highest
 network availability in harsh conditions,
 along with best-in-class integrated firewall
 protection to address growing security
- Easily configurable and customizable –
 while remaining simple to configure and
 use with minimal product knowledge, its
 open LINUX platform allows for advanced
 customization.
- Reliable remote access remote access
 to widely distributed machines, industrial
 equipment and mobile applications enables
 customers to monitor and control industrial
 equipment remotely. This minimizes timeconsuming on-site visits and delivers cost
 savings.

The OWL 3G is designed for industrial applications where hardened, industrial-grade solutions are required to deliver high-performance routing, while ensuring network security.

Applications

The new OWL 3G has a comprehensive set of features designed for use in power transmission and distribution and machine building settings.

Due to its ability to securely and reliably connect an Ethernet network to the Internet, the OWL 3G is a key solution for companies taking advantage of Industrial Internet of Things (IIoT) technologies.

The OWL 3G solution is also relevant for other industrial sectors, including water and wastewater, wind and solar power, security, and transportation.

Your Benefits

The OWL 3G is a reliable routing and security solution for industrial applications. The router's configuration reduces total infrastructure costs by combining functionalities; decreases potential failure points; and makes overall management and monitoring easier.

As machine builders, system integrators and automation vendors search for easy and costeffective ways to monitor and troubleshoot machines without going on-site or creating connections where wired networks are not feasible, the OWL 3G's cellular capabilities become vastly important. Problems can be solved quickly and support costs can be drastically reduced with the OWL 3G's remote access capabilities.

A new product to serve your needs. Be certain.







Solve problems quickly and cost efficiently with new industrial router's remote capabilities. The OWL 3G is equipped with two Ethernet 10/100 ports, offering greater configuration and customization. Its two SIM card holders back up communication in mobile operator networks and provide failover to one another, enhancing overall network availability.

The 3G Universal Mobile Telecommunications System (UMTS)/High Speed Packet Access (HSPA)+ router supports creation of virtual private network (VPN) tunnels using technologies, including IPsec, OpenVPN and Layer 2 Tunneling Protocol (L2TP), to ensure secure communication. A web interface provides robust statistics and a detailed log of the 3G router's activities and signal strength.

Benefits at a Glance

- Two-in-one solution offering both routing and security capabilities
- Hardened for substations
- EN 301 511, EN 301 908-1/-2/-13, E8, EN 60 950 and CE compliant
- Operating environment of -40 °C to +70 °C
- Advanced routing and networking functions
- Dual SIM cards use two different network operations in combination with the automatic switchover function
- Open LINUX platform
- Secure VPN Tunneling (OpenVPN, IPsec VPN) through X.509 authentification
- Supports functions: DHCP, NAT, NAT-T, DynDNS, NTP, VRRP, control by SMS









Technical Information

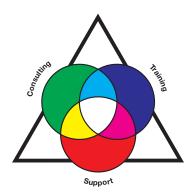
Type	Product Description	
Description		OWL 3G-S20TT9999209SDAHHXX.X.
Port Type and Quantity	,,	
Order No. 942 145-001 Radio Technology Antenna Connector 2 x SMA jack antenna connectors Antenna Configuration Main + Rx Div Frequency Band Quad-Band GSM: 950/90/1800/1900 MHz Frequency Band Quad-Band GSM: 950/900/1800/1900 MHz Transfer Rate (max) 14.4 Mbps down, 5.76 Mbps up SIM-cards Two SIM card holders, Dual-SIM fail over functionality • Switch SIM on disconnect • Switch SIM on in remaining data volume • Switch SIM on remaining data volume Communication Interfaces Ethernet 2 x 10/100BASE-TX ports Power Requirements Operating Voltage 12 V DC to 24 V DC Power Consumption 2.3 to 5.5 W Ambient Conditions Question Temperature Operating Voltage 40 °C to +70 °C Storage/Transport Temperature -40 °C to +85 °C Relative Humidity (non-condensing) max. 95% Mechanical Construction Dimensions (W x H x D) 42 x 113.5 x 80.5 mm Mounting DIN Rail Weight 280 g Protection Class IP30 <td></td> <td></td>		
Antenna Connector 2 x SMA jack antenna connectors Antenna Configuration Main + Rx Div Frequency Band Quad-Band GSM: 850/900/1800/1900/2100 MHz Frequency Band Pive-Band UMTS/HSPA+: 800/850/900/1900/2100 MHz Transfer Rate (max) 14.4 Mbps down, 5.76 Mbps up SIM-cards Two SIM card holders, Dual-SIM fail over functionality - Switch SIM on disconnect - Switch SIM on roaming - Switch SIM on Promise Province Communication Interfaces Ethernet 2 x 10/100BASE-TX ports Power Requirements Operating Voltage 12 V DC to 24 V DC Power Consumption 2.3 to 5.5 W Ambient Conditions Operating Temperature -40 °C to +70 °C Storage/Transport Temperature -40 °C to +85 °C Relative Humidity (non-condensing) max. 95% Mechanical Construction Dimensions (W x x D) 42 x 113.5 x 80.5 mm Mounting DiN Rail Weight 280 g Protection Class ip30 Software VPN Tunneling OpenVPN (Client/Server), IPSec VPN (Client/Server), L2TP (Client/Server), GRE Security HTTPs, Firewall (SPI), NAT, X.509 Diagnostics & Configuration SMMP, DHCP (Client/Server) network status, syslog, DynDNS, NTP (Client/Server), HiDiscovery Redundancy VRRP, ping monitoring with route failover Configuration Management Upload/download configuration, change configuration based on SMS Approvals		
Antenna Configuration Main + Rx Div Frequency Band Quad-Band GSM: 850/900/1800/1900 MHz Five-Band UMTS/HSPA+: 800/850/900/1900/2100 MHz Transfer Rate (max) 14.4 Mbps down, 5.76 Mbps up SIM-cards Two SIM card holders, Dual-SIM fail over functionality	Radio Technology	
Frequency Band Quad-Band GSM: 850/900/1800/1900 MHz Five-Band UMTS/MSPA+: 800/850/900/1900/2100 MHz Transfer Rate (max) 14.4 Mbps down, 5.76 Mbps up SIM-cards Two SIM card holders, Dual-SIM fail over functionality • Switch SIM on disconnect • Switch SIM on roraming • Sw	Antenna Connector	2 x SMA jack antenna connectors
Five-Band UMTS/HSPA+: 800/850/900/1900/2100 MHz Transfer Rate (max) 14.4 Mbps down, 5.76 Mbps up Two SIM card holders, Dual-SIM fail over functionality - Switch SIM on disconnect - Switch SIM on remaining data volume Communication Interfaces Ethernet 2 x 10/1008ASE-TX ports Power Requirements Operating Voltage 12 V DC to 24 V DC Power Consumption 2.3 to 5.5 W Ambient Conditions Operation Temperature -40 °C to +70 °C Storage/Transport Temperature -40 °C to +85 °C Relative Humidity (non-condensing) max. 95% Mechanical Construction Dimensions (W x H x D) 42 x 113.5 x 80.5 mm Mounting DIN Rail Weight 280 g Protection Class IP30 Software VPN Tunneling OpenVPN (Client/Server), IPsec VPN (Client/Server), L2TP (Client/Server), GRE Security HTTPs, Firewall (SPI), NAT, X.509 Diagnostics & Configuration SMP, Dice (Client/Server) entwork status, syslog, DynDNS, NTP (Client/Server), HiDiscovery Redundancy VRRP, ping monitoring with route failover Configuration Management Upload/download configuration, change configuration based on SMS Approvals	Antenna Configuration	Main + Rx Div
SIM-cards Two SIM card holders, Dual-SIM fail over functionality Switch SIM on disconnect Switch SIM on reaming data volume Switch SIM on reaming Switch Simplement Switch SiM on reaming Switch SiM on reaming Switch Sim o	Frequency Band	
Switch SIM on disconnect Switch SIM on roaming Switch SIM on roaming data volume Communication Interfaces Ethernet 2 x 10/100BASE-TX ports Power Requirements Operating Voltage 12 V DC to 24 V DC Power Consumption 2.3 to 5.5 W Ambient Conditions Operation Temperature -40 °C to +70 °C Storage/Transport Temperature -40 °C to +85 °C Relative Humidity (non-condensing) max. 95% Mechanical Construction Dimensions (W x H x D) 42 x 113.5 x 80.5 mm Mounting DIN Rail Weight 280 g Protection Class IP30 Software VPN Tunneling OpenVPN (Client/Server), IPsec VPN (Client/Server), L2TP (Client/Server), GRE Security HTTPs, Firewall (SPI), NAT, X.509 Diagnostics & Configuration SMMP, DHCP (Client/Server), network status, syslog, DynDNS, NTP (Client/Server), HiDiscovery Redundancy VRRP, ping monitoring with route failover Configuration Management Upload/download configuration, change configuration based on SMS Approvals	Transfer Rate (max)	14.4 Mbps down, 5.76 Mbps up
Switch SIM on roaming Switch SIM on remaining data volume Communication Interfaces Ethernet 2 x 10/100BASE-TX ports Power Requirements Operating Voltage 12 V DC to 24 V DC Power Consumption 2.3 to 5.5 W Ambient Conditions Operation Temperature -40 °C to +70 °C Storage/Transport Temperature -40 °C to +85 °C Relative Humidity (non-condensing) max. 95% Mechanical Construction Dimensions (W x H x D) 42 x 113.5 x 80.5 mm Mounting Din Rail Weight 280 g Protection Class IP30 Software VPN Tunneling OpenVPN (Client/Server), IPsec VPN (Client/Server), L2TP (Client/Server), GRE Security HTTPs, Firewall (SPI), NAT, X.509 Diagnostics & Configuration SMS, Pipp ping monitoring with route failover Configuration Management Upload/download configuration, change configuration based on SMS Approvals	SIM-cards	Two SIM card holders, Dual-SIM fail over functionality
Ethernet 2 x 10/100BASE-TX ports Power Requirements Operating Voltage 12 V DC to 24 V DC Power Consumption 2.3 to 5.5 W Ambient Conditions Operation Temperature -40 °C to +70 °C Storage/Transport Temperature -40 °C to +85 °C Relative Humidity (non-condensing) max. 95% Mechanical Construction Dimensions (W x H x D) 42 x 113.5 x 80.5 mm Mounting DIN Rail Weight 280 g Protection Class IP30 Software VPN Tunneling OpenVPN (Client/Server), IPsec VPN (Client/Server), L2TP (Client/Server), GRE Security HTTPs, Firewall (SPI), NAT, X.509 Diagnostics & Configuration SMMP, DHCP (Client/Server) network status, syslog, DynDNS, NTP (Client/Server), HiDiscovery Redundancy VRRP, ping monitoring with route failover Configuration Management Upload/download configuration, change configuration based on SMS Approvals		Switch SIM on roaming
Power Requirements Operating Voltage 12 V DC to 24 V DC Power Consumption 2.3 to 5.5 W Ambient Conditions Operation Temperature -40 °C to +70 °C Storage/Transport Temperature -40 °C to +85 °C Relative Humidity (non-condensing) max. 95% Mechanical Construction Dimensions (W x H x D) 42 x 113.5 x 80.5 mm Mounting DIN Rail Weight 280 g Protection Class IP30 Software VPN Tunneling OpenVPN (Client/Server), IPsec VPN (Client/Server), L2TP (Client/Server), GRE Security HTTPs, Firewall (SPI), NAT, X.509 Diagnostics & Configuration SNMP, DHCP (Client/Server) network status, syslog, DynDNS, NTP (Client/Server), HiDiscovery Redundancy VRRP, ping monitoring with route failover Configuration Management Upload/download configuration, change configuration based on SMS Approvals	Communication Interfaces	
Operating Voltage 12 V DC to 24 V DC Power Consumption 2.3 to 5.5 W Ambient Conditions Operation Temperature -40 °C to +70 °C Storage/Transport Temperature -40 °C to +85 °C Relative Humidity (non-condensing) max. 95% Mechanical Construction Dimensions (W x H x D) 42 x 113.5 x 80.5 mm Mounting DIN Rail Weight 280 g Protection Class IP30 Software VPN Tunneling OpenVPN (Client/Server), IPsec VPN (Client/Server), L2TP (Client/Server), GRE Security HTTPs, Firewall (SPI), NAT, X.509 Diagnostics & Configuration SNMP, DHCP (Client/Server) network status, syslog, DynDNS, NTP (Client/Server), HiDiscovery Redundancy VRRP, ping monitoring with route failover Configuration Management Upload/download configuration, change configuration based on SMS Approvals	Ethernet	2 x 10/100BASE-TX ports
Power Consumption 2.3 to 5.5 W Ambient Conditions Operation Temperature -40 °C to +70 °C Storage/Transport Temperature -40 °C to +85 °C Relative Humidity (non-condensing) max. 95% Mechanical Construction Dimensions (W x H x D) 42 x 113.5 x 80.5 mm Mounting DIN Rail Weight 280 g Protection Class IP30 Software VPN Tunneling OpenVPN (Client/Server), IPsec VPN (Client/Server), L2TP (Client/Server), GRE Security HTTPs, Firewall (SPI), NAT, X.509 Diagnostics & Configuration SNMP, DHCP (Client/Server) network status, syslog, DynDNS, NTP (Client/Server), HiDiscovery Redundancy VRRP, ping monitoring with route failover Configuration Management Upload/download configuration, change configuration based on SMS Approvals	Power Requirements	
Ambient Conditions Operation Temperature -40 °C to +70 °C Storage/Transport Temperature -40 °C to +85 °C Relative Humidity (non-condensing) max. 95% Mechanical Construction Dimensions (W x H x D) 42 x 113.5 x 80.5 mm Mounting DIN Rail Weight 280 g Protection Class IP30 Software VPN Tunneling OpenVPN (Client/Server), IPsec VPN (Client/Server), L2TP (Client/Server), GRE Security HTTPs, Firewall (SPI), NAT, X.509 Diagnostics & Configuration SNMP, DHCP (Client/Server) network status, syslog, DynDNS, NTP (Client/Server), HiDiscovery Redundancy VRRP, ping monitoring with route failover Configuration Management Upload/download configuration, change configuration based on SMS Approvals	Operating Voltage	12 V DC to 24 V DC
Deration Temperature -40 °C to +70 °C Storage/Transport Temperature -40 °C to +85 °C Relative Humidity (non-condensing) max. 95% Mechanical Construction Dimensions (W x H x D) 42 x 113.5 x 80.5 mm Mounting DIN Rail Weight 280 g Protection Class IP30 Software VPN Tunneling OpenVPN (Client/Server), IPsec VPN (Client/Server), L2TP (Client/Server), GRE Security HTTPs, Firewall (SPI), NAT, X.509 Diagnostics & Configuration SNMP, DHCP (Client/Server) network status, syslog, DynDNS, NTP (Client/Server), HiDiscovery Redundancy VRRP, ping monitoring with route failover Configuration Management Upload/download configuration, change configuration based on SMS Approvals	Power Consumption	2.3 to 5.5 W
Storage/Transport Temperature -40 °C to +85 °C Relative Humidity (non-condensing) max. 95% Mechanical Construction Dimensions (W x H x D) 42 x 113.5 x 80.5 mm Mounting DIN Rail Weight 280 g Protection Class IP30 Software VPN Tunneling OpenVPN (Client/Server), IPsec VPN (Client/Server), L2TP (Client/Server), GRE Security HTTPs, Firewall (SPI), NAT, X.509 Diagnostics & Configuration SNMP, DHCP (Client/Server) network status, syslog, DynDNS, NTP (Client/Server), HiDiscovery Redundancy VRRP, ping monitoring with route failover Configuration Management Upload/download configuration, change configuration based on SMS Approvals	Ambient Conditions	
Relative Humidity (non-condensing) Mechanical Construction Dimensions (W x H x D) 42 x 113.5 x 80.5 mm Mounting DIN Rail Weight 280 g Protection Class IP30 Software VPN Tunneling OpenVPN (Client/Server), IPsec VPN (Client/Server), L2TP (Client/Server), GRE Security HTTPs, Firewall (SPI), NAT, X.509 Diagnostics & Configuration SNMP, DHCP (Client/Server) network status, syslog, DynDNS, NTP (Client/Server), HiDiscovery Redundancy VRRP, ping monitoring with route failover Configuration Management Upload/download configuration, change configuration based on SMS Approvals	Operation Temperature	-40 °C to +70 °C
Mechanical Construction Dimensions (W x H x D)	Storage/Transport Temperature	-40 °C to +85 °C
Dimensions (W x H x D) 42 x 113.5 x 80.5 mm Mounting DIN Rail Weight 280 g Protection Class IP30 Software VPN Tunneling OpenVPN (Client/Server), IPsec VPN (Client/Server), L2TP (Client/Server), GRE Security HTTPs, Firewall (SPI), NAT, X.509 Diagnostics & Configuration SNMP, DHCP (Client/Server) network status, syslog, DynDNS, NTP (Client/Server), HiDiscovery Redundancy VRRP, ping monitoring with route failover Configuration Management Upload/download configuration, change configuration based on SMS Approvals	Relative Humidity (non-condensing)	max. 95%
Mounting DIN Rail Weight 280 g Protection Class IP30 Software VPN Tunneling OpenVPN (Client/Server), IPsec VPN (Client/Server), L2TP (Client/Server), GRE Security HTTPs, Firewall (SPI), NAT, X.509 Diagnostics & Configuration SNMP, DHCP (Client/Server) network status, syslog, DynDNS, NTP (Client/Server), HiDiscovery Redundancy VRRP, ping monitoring with route failover Configuration Management Upload/download configuration, change configuration based on SMS Approvals	Mechanical Construction	
Weight 280 g Protection Class IP30 Software VPN Tunneling OpenVPN (Client/Server), IPsec VPN (Client/Server), L2TP (Client/Server), GRE Security HTTPs, Firewall (SPI), NAT, X.509 Diagnostics & Configuration SNMP, DHCP (Client/Server) network status, syslog, DynDNS, NTP (Client/Server), HiDiscovery Redundancy VRRP, ping monitoring with route failover Configuration Management Upload/download configuration, change configuration based on SMS Approvals	Dimensions (W x H x D)	42 x 113.5 x 80.5 mm
Protection Class IP30 Software VPN Tunneling OpenVPN (Client/Server), IPsec VPN (Client/Server), L2TP (Client/Server), GRE Security HTTPs, Firewall (SPI), NAT, X.509 Diagnostics & Configuration SNMP, DHCP (Client/Server) network status, syslog, DynDNS, NTP (Client/Server), HiDiscovery Redundancy VRRP, ping monitoring with route failover Configuration Management Upload/download configuration, change configuration based on SMS Approvals	Mounting	DIN Rail
Software VPN Tunneling OpenVPN (Client/Server), IPsec VPN (Client/Server), L2TP (Client/Server), GRE Security HTTPs, Firewall (SPI), NAT, X.509 Diagnostics & Configuration SNMP, DHCP (Client/Server) network status, syslog, DynDNS, NTP (Client/Server), HiDiscovery Redundancy VRRP, ping monitoring with route failover Configuration Management Upload/download configuration, change configuration based on SMS Approvals	Weight	280 g
VPN Tunneling OpenVPN (Client/Server), IPsec VPN (Client/Server), L2TP (Client/Server), GRE Security HTTPs, Firewall (SPI), NAT, X.509 Diagnostics & Configuration SNMP, DHCP (Client/Server) network status, syslog, DynDNS, NTP (Client/Server), HiDiscovery Redundancy VRRP, ping monitoring with route failover Configuration Management Upload/download configuration, change configuration based on SMS Approvals	Protection Class	IP30
Security HTTPs, Firewall (SPI), NAT, X.509 Diagnostics & Configuration SNMP, DHCP (Client/Server) network status, syslog, DynDNS, NTP (Client/Server), HiDiscovery Redundancy VRRP, ping monitoring with route failover Configuration Management Upload/download configuration, change configuration based on SMS Approvals	Software	
Diagnostics & Configuration SNMP, DHCP (Client/Server) network status, syslog, DynDNS, NTP (Client/Server), HiDiscovery Redundancy VRRP, ping monitoring with route failover Configuration Management Upload/download configuration, change configuration based on SMS Approvals	VPN Tunneling	OpenVPN (Client/Server), IPsec VPN (Client/Server), L2TP (Client/Server), GRE
Redundancy VRRP, ping monitoring with route failover Configuration Management Upload/download configuration, change configuration based on SMS Approvals	Security	HTTPs, Firewall (SPI), NAT, X.509
Configuration Management Upload/download configuration, change configuration based on SMS Approvals	Diagnostics & Configuration	SNMP, DHCP (Client/Server) network status, syslog, DynDNS, NTP (Client/Server), HiDiscovery
Approvals	Redundancy	VRRP, ping monitoring with route failover
***		Upload/download configuration, change configuration based on SMS
Safety of Industrial Control Equipment EN 60950-1	, , , , , , , , , , , , , , , , , , , ,	EN 60950-1
Radio Europe: • EN 301 511, Radio Requirements GSM • EN 301 908-1 & EN 301 908-2, Radio Requirements UMTS/HSPA • EN 62311, Human Exposure restrictions for EM-Fields	Radio	EN 301 511, Radio Requirements GSM EN 301 908-1 & EN 301 908-2, Radio Requirements UMTS/HSPA
Transportation E8 (road vehicle approval)	Transportation	E8 (road vehicle approval)
Environmental EN 61000-6-2, EN 301 489, EN 61131 for use in automation environment	Environmental	EN 61000-6-2, EN 301 489, EN 61131 for use in automation environment

NOTE: These are the prominent technical specifications. For complete technical specifications visit: www.hirschmann.com

3



Belden Competence Center



As the complexity of communication and connectivity solutions has increased, so have the requirements for design, implementation and maintenance of these solutions. For users, acquiring and verifying the latest expert knowledge play a decisive role in this. As a reliable partner for end-to-end solutions, Belden offers expert consulting, design, technical support, as well as technology and product training courses, from a single source: Belden Competence Center. In addition, we offer you the right qualification for every area of expertise through the world's first certification program for industrial networks. Up-to-date manufacturer's expertise, an international service network and access to external specialists guarantee you the best possible support for products from Belden, GarrettCom, Hirschmann, Lumberg Automation and Tofino Security.

Irrespective of the technology you use, you can rely on our full support – from implementation to optimization of every aspect of daily operations.

Always Stay Ahead with Belden

In a highly competitive environment, it is crucial to have reliable partners who are able to add value to your business. When it comes to signal transmissions, Belden is the number one solutions provider. We understand your business and want to know your specific challenges and targets to see how effective signal transmission solutions can push you ahead of the competition. By combining the strengths of our five leading brands, Belden, GarrettCom, Hirschmann, Lumberg Automation and Tofino Security, we are able to offer the solution you need. Today it may be a single cable, a switch or a connector, thus solving a specific issue; tomorrow it can be a complex range of integrated applications, systems and solutions.

About Belden

Belden Inc., a global leader in high quality, end-to-end signal transmission solutions, delivers a comprehensive product portfolio designed to meet the mission-critical network infrastructure needs of industrial, enterprise and broadcast markets. With innovative solutions targeted at reliable and secure transmission of rapidly growing amounts of data, audio and video needed for today's applications, Belden is at the center of the global transformation to a connected world. Founded in 1902, the company is headquartered in St. Louis, USA, and has manufacturing capabilities in North and South America, Europe and Asia.

For more information, visit us at www.beldensolutions.com and follow us on Twitter @BeldenInc.

Belden, Belden Sending All The Right Signals, Hirschmann, GarrettCom, Lumberg Automation, Tofino Security and the Belden logo are trademarks or registered trademarks of Belden inc. or its affiliated companies in the United States and other jurisdictions. Belden and other parties may also have trademark rights in other terms used herein.