

Welbeck Model 7111 Series Secure Network Gateways

Multi-port Wired Ethernet and Integrated Wi-Fi



- Connect, protect and manage
- Reliable always-on secure connectivity and remote cloud management.
- 5 wired Ethernet ports and 802.11 b/g/n Wi-Fi
- Dual-radio 802.11 ac option
- Perfect for machine-to-machine (M2M)/ Internet of Things (IoT) and redundancy applications.

- Full access WAN router and Layer 2 bridge with stateful firewall/ACLs and full redundancy/high-availability.
- Load-balancing and link-aggregation supports up to 64 independent network connections
- Transparent to all Ethernet L2/LAN traffic including SCADA, PLCs, H.263/H.264, IP Cameras, VLANs.
- Advanced end-to-end security with TLSv1.2, X.509 v3 PKI certs, Perfect Forward Secrecy, AES-256GCM/SHA-3 encryption, dynamic keying, no pre-shared keys.
- Integrated hot/hot failover redundancy—network transparent; no reconfiguration after failover.
- Wi-Fi access point (WAP) and uplink client simultaneously.



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Device Overview

- Sturdy all-metal enclosure with integrated mounting flanges.
- Cool low-power & fan-less operation. Eight status LEDs.
- Provides a single transparent point-to-point secure Ethernet tunnel bridged or L3 routed IP links, full-duplex, and transparent operation.
- Auto-discovery of tunnel endpoints through NAT/Routers/Proxies.
- Unlimited host support. Unlimited Networks, Unlimited VLANs, Unlimited Users.
- Configurable compulsory tunnel or split-tunnel operation.
- Firewall and ACLs provide granular traffic management as well as protection for Local, Uplink, and each Tunnel.
- AutoConnect™, FastLaneNBX™ and FlexPath™ redundancy.
- Works with Dynamic IP, NATs, and Nested NAT environments.

Network Interface

- Five ports 802.3TX Gig-Ethernet, RJ45 jacks; Auto-sensing all ports.
- 802.11 b/g/n Wi-Fi access point (WAP) and wireless client uplink with WPA/WPA2 and MAC deny/allow. Available additional 802.11.ac dual-radio support.
- Available 4G LTE cellular for international use. External SIM slot.
- Dual RP-SMA 2dBi detachable antennas.
- Any interface can be used to establish tunnel.

Management & Configuration

- Internal web server and control with selectable HTTP/HTTPS
- SNMP v1 MIB II; User selectable enable/disable, SNMP Variables, Tunnel Status & Tunnel Octet In/Out, Ethernet Status & Ethernet Octet In/Out. SNMP Traps for device and tunnel events.
- Syslog output with configurable server.
- User definable IP Address and Subnet Mask and Port for management.
- DHCP client for automatic address with simultaneous static secondary IP.
- Use with integrated management tools for local or remote management and full positive control. Available separate independent routed tunnel and cloud access to UI.
- GPS: Indoor reception better than -165 dBm with A-GPS; Accuracy 3m, TIFF Cold start 42s, Multi Channel L1 1575.52Mhz. NEMA 0183 raw data output available.

Regulatory Compliance & Certifications

- NRTL Safety: UL 60950-1, CSA C22.2 No. 60950-1; AS / NZS 3260, TS 001.
- Emissions: FCC Part 15 Class B/C, EN 55022A.
- CE Mark, RoHS, WEEE.
- 4G LTE card interface GCF, Europe.
- FIPS 140-2 compliant version available.

Redundancy & High-Availability

- Active/active Multi-path Redundancy and WAN Link Auto-failover with multiple internet service providers (ISPs) or between ISP & 4G.
- Active Deadpeer detection with Multisite uptime failover mechanism
- Failover without MAC—spoofing VRRP/HSRP
- Multi-interface Link Bonding and Load Balancing—up to 64 links.

Connectivity & Security

- TLSv1.2, L2TPv3, PPTPWrapper Tunnel operations with AES-256 CBC key encryption; Perfect Forward Secrecy.
- Configurable TCP/UDP tunnel with single port for all control & payload. No-configuration required for NAT and Firewall traversal.
- Dynamic keying and automatic rekeying (every five minutes or user configurable) with X.509v3 PKI certificates. Username/Password option for tunnel authorization. Separate per-tunnel password for link authorization.
- Auto-learning with 8,192 MAC address table and unlimited hosts and networks support between LANs.
- Jumbo Ethernet frames with default MTU of 2K. VLAN (4,096) tagging on Client or Server; VLAN trunking out single Ethernet; InterVLAN routing. Will pass VLANs, VTP, & ISL.
- User selectable voluntary/compulsory and tunnel gateway modes through filters. Compulsory dictates all traffic will go through tunnel—No local-to-uplink access. Voluntary tunnel will only ARP for tunnel subnet traffic/hosts—Default internet access via local router.
- ACL/Firewall permit/allow traffic from any interface. Separate Firewall rules for device access.
- Lossless compression—typical 20%-30% efficiency.
- Integrated DHCP client and server, DNS server, & NTP client.
- RealTimeResource™ DNS services & AutoConnect™ standard. Built - in DynDNS client.
- Routed mode supports full IPv4 routing.
- IP-Sharing™ Half-Bridge with Tunnel NAT Permits/Forwards.

Filtering & Quality of Service

- User configurable L2 and L3 filters on IP/Port or MAC Address. Stateful inspection processing and filtering with new, established, or related operation. Quick access buttons for immediate config.
- DSCP/TOS priority into three queues. E.g. EF = priority queue 0.
- Traffic-shaping to prioritize latency-sensitive traffic (e.g. video).

Operating

- Desktop, wall or machine mounting. Integral flanges.
- 12VDC@1A power input via coax barrel jack.
- Temperature: 0° to 50°C
- Humidity: up to 90% non-condensing.

Available models:

- **Model 7010** 5x Ethernet TX Ports. No WiFi. No antennas.
- **Model 7111** 5x Ethernet TX Ports and integrated 802.11 b/g/n Wi-Fi.
- **Model 7121** 5x Ethernet TX Ports and integrated 802.11 ac + b/g/n/Wi-Fi.
- **Model 7151-01** 5x Ethernet TX Ports, integrated Wi-Fi and international 4G LTE modem with external SIM slot.

