Digi Connect® WAN Family

Cellular Gateways/Routers/VPN Devices

Small, cost-optimized cellular routers utilize global cellular networks for secure connectivity to remote sites and devices.

Overview

Digi Connect WAN cellular routers provide secure high-speed wireless connectivity to remote sites and devices. These products can be used for reliable primary wireless network connectivity to equipment at remote locations, as well as for a backup to existing landline communications. The Digi Connect WAN family is also ideal for use where wired networks are not feasible, or where alternative network connections are required.

Digi Connect WAN products provide a primary Wireless WAN connection to remote sites containing Ethernet and/or serial devices. Applications include new construction locations, industrial automation, power utility substations, retail/POS sites, railroad, temporary facilities without primary wired connections, and many more.

For backup network applications, Digi Connect WAN integrates with remote locations via a secondary Ethernet WAN port on an existing router. This provides a truly diverse network connection for remote locations requiring maximum uptime.

Target Applications

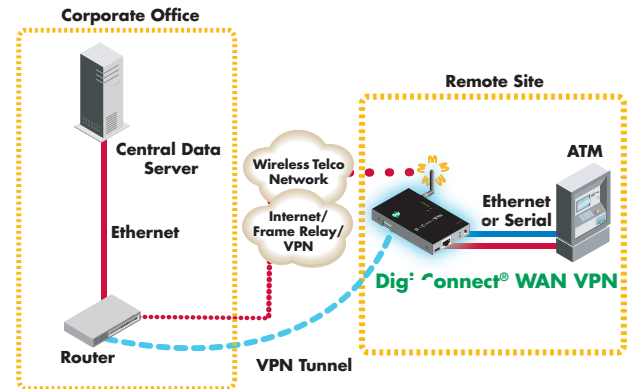Utilities

Industrial Automation

Traffic Management

Remote Device Management

Retail/POS

Application Highlight

Corporate Office

Central Data Server

Ethernet

Router

Wireless Telco Network

Internet/ Frame Relay/ VPN

VPN Tunnel

Remote Site

ATM

Ethernet or Serial

Digi Connect® WAN VPN

Features/Benefits

- Small, cost-optimized cellular routers with integrated VPN
- 2G/2.5G (GSM GPRS/EDGE & CDMA 1xRTT) models with 1 serial, 1 Ethernet port
- 3G (GSM HSDPA/UMTS & EV-DO Rev A PCI Express module) with 1 serial, 1 Ethernet, 1 USB, 1 sensor port
- Digi Connectware® Manager enables remote management of many remote devices
- Unique Digi SureLink™ maintains "always-on" wireless connection
- Programmable in Python for device customization

Digi Connect® WAN

2.5G Wireless WAN cellular router. Provides high performance wireless TCP/IP data communications via cellular GSM EDGE and CDMA 1xRTT networks to remote sites and devices.

Digi Connect® WAN 3G

3G high speed upgradeable HSPA/EV-DO Rev A Wireless WAN cellular router with integrated VPN. Provides primary and backup connectivity to remote sites and devices.

Digi Connect® WAN GPRS

2G Wireless WAN cellular router/gateway. Provides reliable GPRS wireless TCP/IP data communications via cellular. Ideal for M2M applications.

Digi Connect WAN VPN

2.5G Wireless WAN cellular router plus integrated VPN. Creates a secure WAN connection via an Ethernet-to-cellular interface.

Digi Connect® WAN IA/ Digi Connect® WAN 3G IA

Industrial-grade 2.5 to 3G Wireless WAN GSM GPRS/EDGE/HSPA, CDMEA/EV-DO router/gateway. Offers all of the functionality of Digi Connect WAN VPN plus an industrial-grade feature set.

Specifications	Digi Connect® WAN GPRS	Digi Connect® WAN / Digi Connect® WAN VPN	Digi Connect® WAN 3G	Digi Connect® WAN IA / Digi Connect® WAN 3G IA
Interfaces				
Serial				
Ports		1 RS-232/422/485 DB-9; Up to 230 Kbps throughput; Hardware and software flow control; Signal support for TXD, RXD, RTS, CTS, DTR, DSR, DCD	1 RS-232 DB-9; Up to 230 Kbps throughput; Hardware and software flow control; Signal support for TXD, RXD, RTS, CTS, DTR, DSR, DCD	1 RS-232/422/485 DB-9; Up to 230 Kbps throughput; Hardware and software flow control; Signal support for TXD, RXD, RTS, CTS, DTR, DSR, DCD
Ethernet				
Ports		1 RJ-45 10/100 Mbps 10Base-T (auto-sensing); Full or half duplex		
Cellular				
GSM GPRS 12/EDGE 12 -or- CDMA 2000 1xRTT	Fixed		Upgradable (PCI Express Module)	Fixed
UMTS/HSDPA & EV-DO Rev A	–		Upgradable (PCI Express Module - 3G models only)	
Other Interfaces				
USB	–		1 USB Type A connector (3G models only)	
Sensor	–			1 sensor port for use with Watchport Sensors (3G IA only)
Dual SIM	–		• (3G models only)	
Features				
Network Protocols		UDP/TCP, DHCP		
Status LEDs		Ethernet, power on, cellular link/activity, signal strength (4 bars)		
Software		Device-initiated patented RealPort COM port redirector and RFC 2217; Digi SureLink "always-on" connection; Python scripting; Custom development environment		
Security		SSL, SSL/TLS, SSHv2, FIPS 197		
Router/Firewall Features		NAT, NAT-T (NAT traversal) VPN tunneling, Port forwarding, VPN/GRE pass-through; Access control lists (IP filtering), IP pass-through, Virtual Router Redundancy Protocol (VRRP) per RFC 3768		

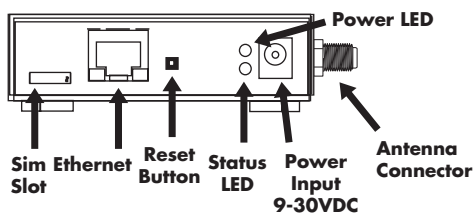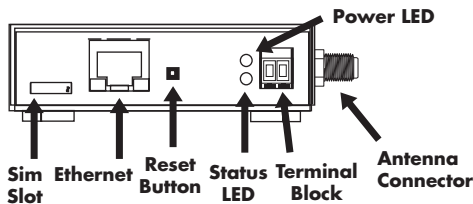| Specifications	Digi Connect® WAN GPRS	Digi Connect® WAN / Digi Connect® WAN VPN	Digi Connect® WAN 3G	Digi Connect® WAN IA / Digi Connect® WAN 3G IA
Features (continued)				
VPN Features	IPsec with IKE/ISAKMP; Multiple tunnel support; DES, 3DES and up to 256-bit AES Encryption, Simple Certificate Enrollment Protocol (SCEP) for X.509 certificateN features not included on Digi Connect WAN model)			
Management	HTTP/HTTPS, CLI or Telnet; Optional secure enterprise management via Digi Connectware Manager			
IA Features	–			DIN rail mounting kit included; Class 1, Div 2 Rating (pending on 3G IA); Terminal block for power; Modbus to Modbus TCP protocol conversion
Dimensions (L x W x H)	5.25 in (13.34 cm) x 3.35 in (8.51 cm) x 0.97 in (2.47 cm) 3G models: 5.30 in (13.46 cm) x 3.38 in (8.58 cm) x 0.98 in (2.48 cm)			
Weight	1.00 lb (0.45 kg)			
RF Features				
GSM Models				
GPRS	850/900/1800/1900 MHz; Max 86 Kbps DL/UL			
EDGE	–	850/900/1800/1900 MHz; 216 Kbps DL, 108 Kbps UL		
HSDPA/HSUPA	–	850/1900/2100 MHz HSDPA: 3.6 Mbps DL, 384 Kbps UL HSUPA: 7.2 Mbps DL, 2.0 Mbps UL (VPN and 3G models only)		
Antenna	One 50 Ohm female SMA connector	WAN model: One 50 Ohm female SMA connector VPN model: 2 antennas (Rx Diversity)	2 antennas (Rx Diversity)	
CDMA Models				
1xRTT	–	800 MHz; Max 153.6 DL/UL		
1xEV-DO	–	1900 MHz; 3.1 Mbps DL, 1.8 Mbps UL (VPN and 3G IA models only)		
Antenna	One 50 Ohm female SMA connector	WAN model: One 50 Ohm female SMA connector VPN model: 2 antennas (Rx Diversity)	2 antennas (Rx Diversity)	
Power Requirements				
Power Input	9-30VDC			
Power Supply	12VDC power supply for 0° C to 60° C (32° F to 140° F) with locking barrel connector included; Extended temperature power supply available			Power supply required (not included)
DC Power Consumption	Idle: 1.2W; Max: 3.4W			
AC Power Consumption	Idle: 2.0W; Max: 5.8W			
Surge Protection	4 kV burst (EFT) per-4-4; 2 kV surge per EN61000-4			
Environmental				
Operating Temperature	GSM models: -25° C to +75° C (-13° F to 167° F) CDMA models: -30° C to +75° C (-22° F to 167° F); Reduced cellular performance will occur above 60° C for CDMA models			
Relative Humidity	5 to 95% (non-condensing)			
Ethernet Isolation	1500VAC min per IEEE 802.3/ANSI X 3.263			
Serial Port Protection (ESD)	+15 kV air gap and +8 kV contact discharge per IEC 1000-4-2			
Approvals				
Safety	UL 60950, CSA 22.2 No. 60950, EN60950			
Emissions/Immunity	CE, FCC Part 15 Class A (FCC identifier GGL-R1902G), AS/NZS CISPR 22, EN55024, EN55022 Class A			
Mobile Certifications - CDMA/EV-DO	CDG, TIA/EIA-690, TIA/EIA-98-E			
Mobile Certifications - GSM/UMTS	PTCRB, NAPRD.03, GCF-CC, R&TTE, EN 301 511			
Wireless Carrier Certifications	Certified by most major carriers. See www.digi.com for current listing.			

Digi Connectware® Manager
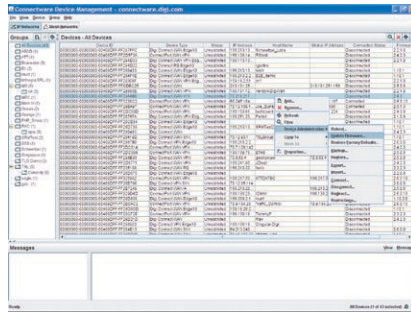
Manage many devices at the same time with just a few clicks

Digi Connectware Manager is an enterprise remote device management software that runs on a customer's central server and can be managed via web interface from anywhere. Administrators have access to one or thousands of devices for management, monitoring, alerts and troubleshooting. Includes built-in Dynamic DNS server for mapping an Internet host name to a dynamic/public IP address.
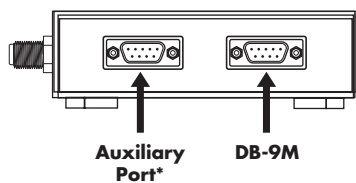
Digi Connect WAN GPRS/VPN - Front

Power LED

Sim Slot | Ethernet | Reset Button | Status LED | Power Input 9-30VDC | Antenna Connector

Digi Connect WAN IA - Front

Power LED

Sim Slot | Ethernet | Reset Button | Status LED | Terminal Block | Antenna Connector

Digi Connect WAN GPRS/IA/VPN - Back

Auxiliary Port* | DB-9M

*Digi Connect WAN IA does not include an auxiliary port

Digi Connect WAN 3G - Top

Power LEDs | Cellular LEDs | Signal Strength LEDs

Digi Connect WAN 3G/ Digi Connect WAN 3G IA - Back

Primary Antenna | Power (3G IA uses terminal block for power) | Ethernet | USB | Sensor (3G IA Only) | Serial | Secondary Antenna
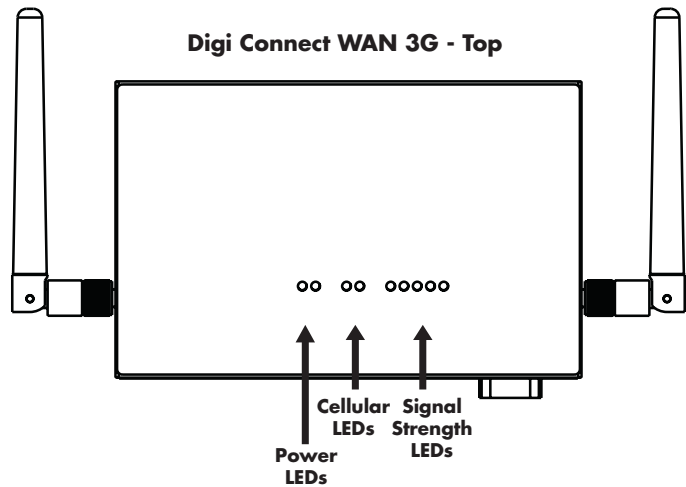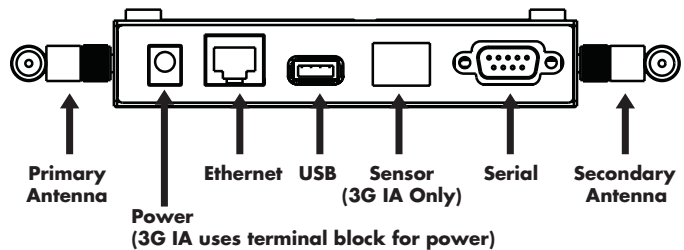
Visit www.digi.com for part numbers.

MAKING Wireless M2M EASY™

91001371
D2/809

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