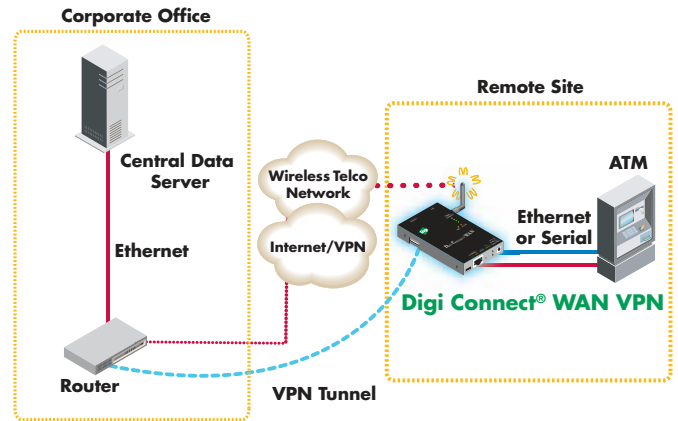


# Digi Connect® WAN Family

Cellular Gateways/Routers/VPN Devices

Cellular routers, gateways and VPN devices provide high performance wireless TCP/IP data communications via cellular GSM/CDMA networks, for primary and backup connectivity to remote sites and devices.



## Features/Benefits

- Hardware suite includes cellular gateways, routers and VPN devices
- GSM GPRS/EDGE or CDMA 1xRTT network for high-speed wireless network connectivity
- Unique Digi SureLink™ "always-on" connection maintains wireless connection for rapid on-demand communications
- 10/100Base-T Ethernet and serial connections
- 9-30VDC for diverse power input
- Web interface for easy centralized console configuration and statistics
- Integrates with Digi Connectware Manager for seamless management and monitoring of hundreds or thousands of devices
- Up to 256-bit AES security provides encryption and authentication for management communications via Digi Connectware Manager
- Specialized model for industrial and synchronous applications

## Overview

The Digi Connect WAN family of commercial-grade Wireless WAN (WWAN) cellular routers, gateways and VPN appliances provides secure high-speed wireless connectivity to remote sites and devices. Digi Connect WAN cellular 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. They are also ideal for use where wired networks (e.g., leased line/frame relay, ISDN, DSL) are not feasible, or where alternative network connections are required.

Digi Connect WAN products are able to provide a primary wireless WAN connection to remotes sites containing both Ethernet or serial devices. New construction locations, power utility substations, small retail/POS sites or temporary facilities without primary wired connections are examples of applications for this wireless connectivity solution.

For backup network applications, Digi Connect WAN cellular products integrate 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, such as retail/POS and financial applications.

Digi SureLink is a unique feature that provides a "persistent connection" over wireless networks by utilizing a three-way client and server initiated scheme. All Digi Connect WAN cellular products seamlessly integrate with Digi Connectware® Manager, which provides easy setup, configuration and maintenance of large installations. Users can upgrade firmware or change settings on thousands of devices with only a few clicks. It also makes troubleshooting simple by reporting problems like identifying misbehaving devices or network issues.

## Features Comparison

### Digi Connect WAN

Wireless WAN cellular router. Provides high performance wireless TCP/IP data communications via cellular GSM/CDMA networks, for primary and backup connectivity to remote locations and devices.

### Digi Connect WAN VPN

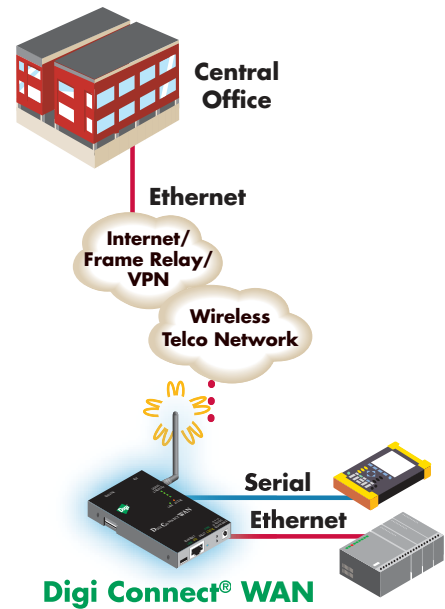
Wireless WAN GSM/CDMA cellular router plus integrated VPN. Creates a secure WAN connection via an Ethernet-to-cellular interface.

### Digi Connect WAN IA

Industrial-grade Wireless WAN GSM/CDMA router/gateway. Offers all of the functionality of Digi Connect WAN VPN plus an industrial-grade feature set.

### Digi Connect WAN Sync

Wireless WAN cellular router with support for legacy synchronous serial devices. Connects to remote synchronous devices, such as ATMs, using standard GSM/CDMA networks.



	Digi Connect® WAN	Digi Connect® WAN VPN	Digi Connect® WAN IA	Digi Connect® WAN Sync
<b>Interfaces</b>				
Serial Port Type	RS-232/422/485	RS-232/422/485	RS-232/422/485	Synchronous
10/100 Ethernet	•	•	•	•
GSM GPRS 12/EDGE 10 -or- CDMA 2000 1xRTT	•	•	•	•
<b>Routing</b>				
NAT, Port Forwarding, DHCP Server/Client, VPN Pass-Through, Firewall - IP Filtering	•	•	•	•
Integrated IPsec VPN		•	•	•
<b>Security</b>				
SSL, SSHv2, FIPS 197, HTTPS	•	•	•	•
<b>Management</b>				
Built-in Web Interface	•	•	•	•
Digi Connectware® Manager	•	•	•	•
<b>Special Features</b>				
Digi SureLink™	•	•	•	•
RealPort® Virtual COM Ports	•	•	•	•
Bisync Protocol with 3270/3275 Emulation				•
DIN Rail Mountable	•	•	• Kit Included	•
Terminal Block for Power, Modbus Support, Class 1, Div 2			•	

## Features/Specifications

### FEATURES

- Easily accessible SIM module
- Network protocols
  - UDP/TCP, DHCP
- Status LEDs
  - Ethernet, power on, cellular link/activity, signal strength
- Patented RealPort for COM ports and RFC 2217

#### Router/Firewall Features

- NAT
- Port forwarding
- VPN pass-through
- Access control lists (IP filtering)

#### Security

- SSL, SSHv2, FIPS 197

#### VPN Features

- *Digi Connect WAN VPN*, *Digi Connect WAN IA*, *Digi Connect WAN Sync*
- IPsec with IKE/ISAKMP
- Multiple tunnel support
- DES, 3DES and AES up to 256-bit encryption

#### IA Features

- *Digi Connect WAN IA*
- DIN rail mounting kit included
- Class 1, Div 2 rating
- Terminal block for power
- Modbus to ModbusTCP protocol conversion

#### Sync Features

- *Digi Connect WAN Sync*
- Bisynch protocol with 3270/3275 emulation

#### RF Features

- *GSM Models*
- Network: Quadband 1900/850 and 1800/900 MHz GSM GPRS/EDGE
- Transmit frequency: 1850-1910 MHz and 824-849 MHz
- Receiver frequency: 1930-1990 MHz and 869-894 MHz
- EDGE multi-slot class 10
- GPRS multi-slot class 12
- Throughput up to 240 Kbps, 100-130 Kbps typical
- RF antenna connector: 50 Ohm SMA
- Attached swivel dipole antenna

#### RF Features

- *CDMA Models*
- Network: 800 MHz CDMA cellular: 1900 MHz CDMA PCS 1xRTT
- Transmit frequency: 1851-1909 MHz and 824-849 MHz
- Receiver frequency: 1931-1989 MHz and 869-894 MHz
- Throughput up to 153 Kbps, 60-80 Kbps typical
- RF antenna connector: 50 Ohm SMA
- Attached swivel dipole antenna

### FEATURES (CONT.)

#### Management

- HTTP and CLI for web management
- Optional secure enterprise management via Digi Connectware Manager

#### ETHERNET INTERFACE

- Connector: RJ-45
- Standard: IEEE 802.3
- Physical Layer: 10/100Base-T
- Data rate: 10/100 Mbps (auto-sensing)
- Mode: full or half duplex (auto-sensing)

#### SERIAL INTERFACE

- RS/232/422/485
- Sync/Bisynch port (Digi Connect WAN Sync only)
- Throughput up to 230 Kbps
- Full signal support for TXD, RXD, RTS, CTS, DTR, DSR and DCD
- Hardware and software flow control
- Can provide diverse out-of-band console management for network devices like routers and switches

#### ENVIRONMENTAL

- Operating temperature: -30° C to 70° C (-22° F to 158° F) for GSM models
- Operating temperature: -30° C to 60° C (-22° F to 140° F) for CDMA models
- Relative humidity: 5% to 95% (non-condensing)
- Ethernet isolation: 1500VAC min per IEEE802.3/ANSI X3.263
- Serial port protection (ESD): +15 kV Air 6 AP and +8 kV contact discharge per IEC 1000-4-2

#### POWER REQUIREMENTS

- Power input: 9-30VDC
- 12VDC power supply for 0° C to 60° C (32° F to 140° F) included; extended temperature available
- DC power consumption
  - Idle: 1.2 W
  - Max: 3.4 W
- AC power consumption
  - Idle: 2.0 W
  - Max: 5.8 W
- Surge protection (with included power supply)
  - 4 kV burst (EFT) per-4-4
  - 2 kV surge per EN61000-4-5 (non-condensing)

### WIRELESS CARRIER CERTIFICATIONS

#### GSM GPRS/EDGE

- Cingular
- Rogers Wireless

#### CDMA 1xRTT

- Sprint
- Centennial Wireless
- Alltel Wireless
- Verizon
- Midwest Wireless

### REGULATORY APPROVALS

#### Mobile Certifications

##### - GSM Models

- PTCRB, NAPRD.03
- GCF-CC
- R&TTE, EN 301 511

##### Mobile Certifications

##### - CDMA Models

- CDG TIA/EIA-690
- CDG TIA/EIA-98-E

#### Safety

- UL 60950
- CSA 22.2 No. 60950
- EN60950

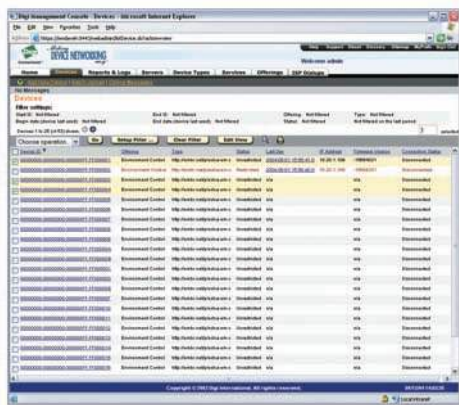
#### Emissions/Immunity

- CE
- FCC Part 15, Class A (FCC identifier GGL-R1902G)
- AS/NZS CISPR 22
- EN55024
- EN55022, Class A

### DIMENSIONS

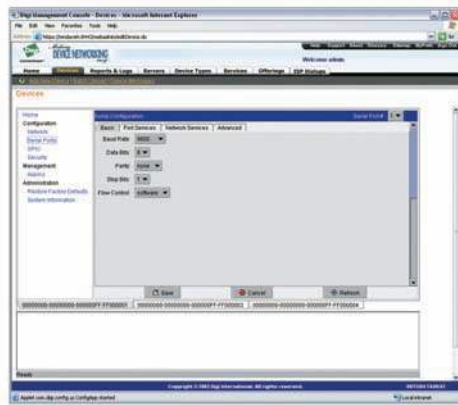
- Width: 3.35 in (8.51 cm)
- Height: 0.97 in (2.47 cm)
- Length: 5.25 in (13.34 cm)
- Weight: 1.00 lb (0.45 g)





**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.



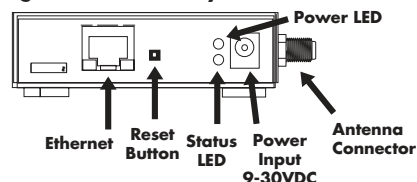
**Easy, web based configuration**

Built-in web user interface provides simple access for local configuration or one-to-one remote access.

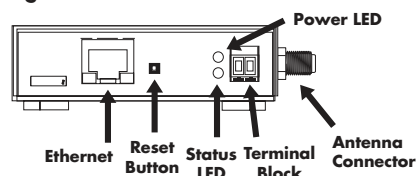
## MODEL.....PART NUMBERS

	<u>North America</u>	<u>International</u>	
<b>GSM Models</b>			
Digi Connect WAN GSM	DC-WAN-GE10A	DC-WAN-GE10A-W	
Digi Connect WAN VPN GSM	DC-VPN-GE10A	DC-VPN-GE10A-W	
Digi Connect WAN IA GSM	DC-WAN-F501	DC-WAN-F501	
Digi Connect WAN Sync GSM	DC-WAN-K401	N/A	
<b>CDMA Models - North America Only</b>	<u>Sprint</u>	<u>Verizon</u>	<u>Alltel</u>
Digi Connect WAN CDMA	DC-WAN-S1XA	DC-WAN-D111	DC-WAN-D116
Digi Connect WAN VPN CDMA	DC-VPN-S1XA	DC-WAN-D311	DC-WAN-D316
Digi Connect WAN IA CDMA	DC-WAN-G510	DC-WAN-G511	TBD
Digi Connect WAN Sync CDMA	DC-WAN-M410	TBD	TBD
<b>Antennas</b>	<u>North America</u>	<u>International</u>	
Dual Band Wireless 2" Monopole Antenna	DC-ANT-DBMP	DC-ANT-DBMP-W	
Dual Band Wireless Desktop 2.8"	DC-ANT-DBDT	DC-ANT-DBDT	
Antenna with 8 ft. Cable			
Dual Band Wireless High Gain 14"	DC-ANT-DBHG	DC-ANT-DBHG	
Antenna with Magnetic Mount			
<b>Accessories</b>	<u>Worldwide</u>		
Extended Temperature Power Supply	76000717		
12VDC Locking Barrel Extended Temperature Hardened Power Supply	76000652		
DB-9F to DB-9F Crossover Cable (4 ft.)	76000642		
DIN Rail Mounting Bracket	76000682		
48VDC to 12VDC Power Converter	76000696		

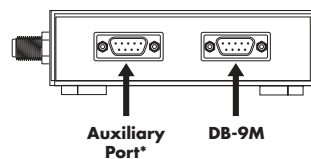
### Digi Connect WAN, Digi Connect WAN VPN, Digi Connect WAN, Sync- Front



### Digi Connect WAN IA - Front



### All Models - Back



\*Digi Connect WAN IA and Digi Connect WAN Sync do not include an auxiliary port

**DIGI SERVICE AND SUPPORT** - You can purchase with confidence knowing that Digi is here to support you with expert technical support and a strong five-year warranty. [www.digi.com/support](http://www.digi.com/support)

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**Digi International**, the leader in device networking for business, develops reliable products and technologies to connect and securely manage local or remote electronic devices over the network or via the web. With over 20 million ports shipped worldwide since 1985, Digi offers the highest levels of performance, flexibility and quality.

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