



CELLULAR ROUTERS  
WITH INTEGRATED VPN



# DIGI CONNECT<sup>®</sup> WAN FAMILY

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

Digi Connect WAN cellular routing gateways 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,

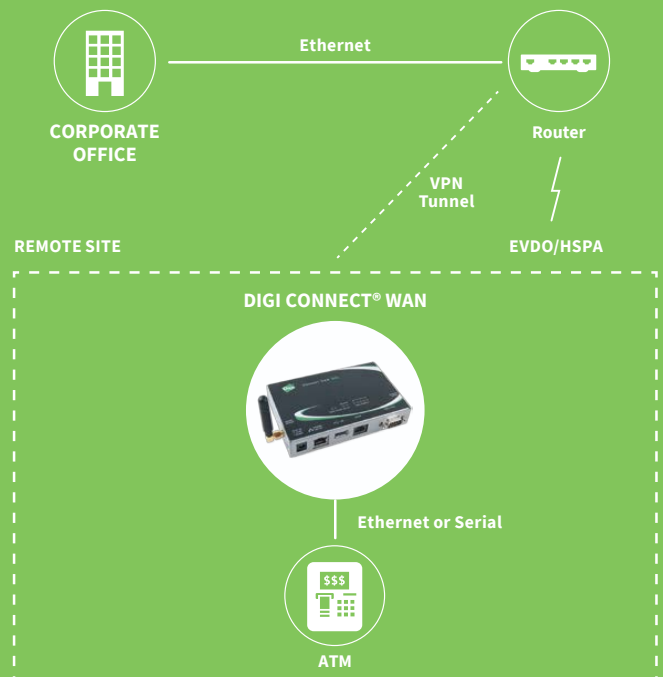
industrial automation, power utility substations, retail/POS sites, railroad, temporary facilities without primary wired connections, and many more.

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.

## BENEFITS

- Small, cost-optimized cellular routers with integrated VPN
- 3G HSPA/HSPA+ and EV-DO with 1 serial, 1 Ethernet, 1 USB, 1 sensor port
- Digi Device Cloud<sup>SM</sup> enables remote management of many remote devices
- Unique Digi SureLink<sup>TM</sup> maintains "always-on" wireless connection
- Programmable in Python for device customization

## APPLICATION EXAMPLE



## RELATED PRODUCTS



Digi TransPort<sup>®</sup>  
WR11



Digi TransPort<sup>®</sup>  
WR21



Digi TransPort<sup>®</sup>  
WR44



ConnectPort<sup>®</sup>  
X4/X4 H



Accessories

## SPECIFICATIONS

## Digi Connect® WAN

## | Digi Connect® WAN IA

## WIRELESS INTERFACES

## WWAN\*\*

|              |  |  |
|--------------|--|--|
| HSPA+ (U9)   | HSPA+ (U9) - 850/900/1700 (AWS)/1900/2100 MHz; Transfer rate (max): 5.76 Mbps up, 21 Mbps down |  |
| CONNECTOR    | 2 x SMA (Center pin - on device: female; on antenna: male)                                     |  |
| SIM SLOTS    | 2  |  |
| SIM SECURITY | SIM slot cover plate   |  |

## OTHER

|           |     |  |
|-----------|-----|--|
| RF        | N/A |  |
| WI-FI     | N/A |  |
| SATELLITE | N/A |  |
| GPS       | N/A |  |

## WIRED INTERFACES

## SERIAL

|                     |                                      |                                      |
|---------------------|--------------------------------------|--------------------------------------|
| PORTS               | 1                                    |                                      |
| STANDARD            | RS-232                               | RS-232/422/485 (Software selectable) |
| DTE/DCE             | DTE                                  |                                      |
| SIGNAL SUPPORT      | TXD, RXD, RTS, CTS, DTR, DSR and DCD |                                      |
| FLOW CONTROL        | Hardware and software flow control   |                                      |
| COM PORT REDIRECTOR | RealPort®                            |                                      |
| THROUGHPUT          | Up to 230 Kbps                       |                                      |
| CONNECTOR           | DB9 Male                             |                                      |

## ETHERNET

|                |                                    |  |
|----------------|------------------------------------|--|
| PORTS          | 1                                  |  |
| STANDARD       | IEEE 802.3                         |  |
| PHYSICAL LAYER | 10/100Base-T                       |  |
| DATA RATE      | 10/100 Mbps (auto-sensing)         |  |
| MODE           | Full or Half duplex (auto-sensing) |  |
| INTERFACE      | Auto MDI/MDIX                      |  |
| CONNECTOR      | RJ-45                              |  |

## I/O

|           |     |  |
|-----------|-----|--|
| PORTS     | N/A |  |
| CONNECTOR | N/A |  |

## USB

|           |            |  |
|-----------|------------|--|
| PORTS     | 1          |  |
| STANDARD  | USB 1.1    |  |
| SIGNALING | Full-speed |  |
| CONNECTOR | Type A     |  |

## OTHER

|        |     |   |
|--------|-----|---|
| SENSOR | N/A | 1 sensor port for use with Watchport® sensors |
|--------|-----|---|

## SPECIFICATIONS

## Digi Connect® WAN

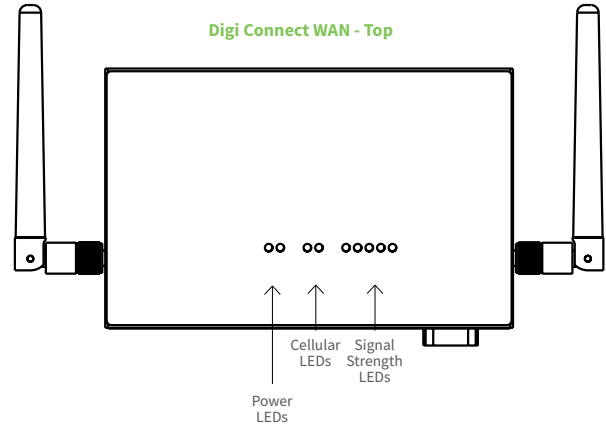
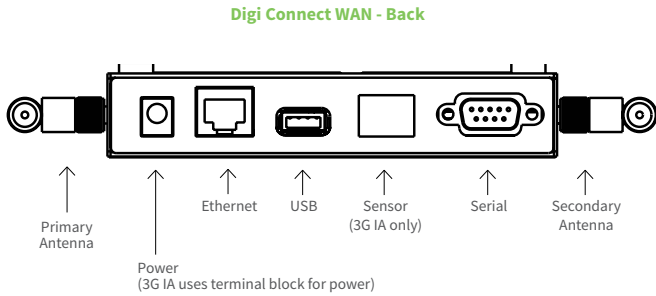
## | Digi Connect® WAN IA

| SOFTWARE/MANAGEMENT          |   |  |
|------------------------------|---|--|
| MANAGEMENT (CLOUD-BASED)     | Digi Device Cloud <sup>SM</sup>   |  |
| MANAGEMENT (LOCAL)           | Web Interface via HTTP/HTTPS, Password access control, IP service port control; CLI via serial port, Telnet, Python scripting; Digi SureLink™ "always-on" connection                              |  |
| SECURITY                     | SSL tunnels, SSHv2, FIPS 197 (IPsec, HTTPS)   |  |
| NETWORK PROTOCOLS            | UDP/TCP, DHCP, SNMPv1/v2  |  |
| VPN                          | IPsec with IKE/ISAKMP; Multiple tunnel support; DES, 3DES and up to 256-bit AES encryption; VPN pass-through, GRE forwarding; Simple Certificate Enrollment Protocol (SCEP) for X.509 certificate |  |
| ROUTING                      | 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     |  |
| INDUSTRIAL PROTOCOL SUPPORT  | N/A   | Modbus bridge enables Modbus serial to Modbus/TCP conversion; Integrated Python code allows gateway to act as Modbus client/master or Modbus server/slave; Functions like an Ethernet to serial bridge, but uses XBee to transport serial data; Handles unique timing issues per Modbus protocol rules; Uses Modbus Unit ID to look up IP or mesh MAC address. |
| REAL-TIME CLOCK              | Yes   |  |
| MEMORY                       | 16 MB Flash, 32 MB RAM  |  |
| POWER                        |   |  |
| INPUT                        | 6-30 VDC  |  |
| CONSUMPTION                  | Idle: 1.5 W, Max: 10.4 W  |  |
| PROTECTION                   | 4 kV burst (EFT) per-4-4, 2 kV surge per EN61000-4  |  |
| CONNECTOR                    | Locking barrel  | Compression terminal block   |
| DC POWER CORD*               | Available upon request  | N/A  |
| AC POWER SUPPLY*             | 12 VDC power supply for 0° C to 40° C (32° F to 104° F) included; Extended temperature power supply available separately  | N/A  |
| BATTERY BACKUP               | N/A   |  |
| PHYSICAL                     |   |  |
| DIMENSIONS (L X W X H)       | 5.25 in x 3.35 in x 1.00 in (13.33 cm x 8.50 cm x 2.54 cm)  |  |
| WEIGHT                       | 0.44 lb (0.20 kg)   |  |
| STATUS LEDS                  | Ethernet status, Power, Cellular link/activity, Signal strength (4 bars)  |  |
| ENCLOSURE MATERIAL           | Industrial (metal)  |  |
| ENCLOSURE RATING             | N/A   |  |
| MOUNTING                     | Wall-mount bracket sold separately  | DIN rail bracket included  |
| ENVIRONMENTAL                |   |  |
| OPERATING TEMPERATURE ***    | -30° C to +75° C (-22° F to +167° F)  |  |
| STORAGE TEMPERATURE          | -40° C to +85° C  |  |
| RELATIVE HUMIDITY            | 5% to 95% (non-condensing)  |  |
| ETHERNET ISOLATION           | 1500 VAC min per IEEE 802.3/ANSI X3.263   |  |
| SERIAL PORT PROTECTION (ESD) | +15 kV Air Gap and +8 kV contact discharge per IEC 1000-4-2   |  |
| HAZARDOUS (CLASS 1 DIV 2)    | No  | Yes  |
| CONFORMAL COATING            | N/A   |  |
| APPROVALS                    |   |  |
| GSM/UMTS                     | PTCRB, NAPRD.03, GCF-CC, R&TTE, EN 301 511  |  |
| CDMA/EV-DO                   | CDG, TIA/EIA-690, TIA/EIA-98-E  |  |
| CELLULAR CARRIERS            | Certified by most major carriers. See <a href="http://www.digi.com">www.digi.com</a> for current listing.   |  |
| SAFETY                       | UL 60950, CSA 22.2 No. 60950, EN60950; Class 1 Div 2 (IA model only)  |  |
| EMISSIONS/IMMUNITY           | CE, FCC Part 15 (Class A), AS/NZS CISPR 22, EN55024, EN55022, Class A   |  |
| WARRANTY                     |   |  |
| PRODUCT WARRANTY             | 5 years   |  |

\* Optional hardware \*\* Transfer rates are network operator dependent

\*\*\* Reduced cellular performance may occur above +60° C. Standard Temperature power supplies may reduce temperature range.

# PRODUCT DESCRIPTION



| PART NUMBERS  | DESCRIPTION   |
|---------------|---|
| DC-WAN-U901-A | Digi Connect WAN Routing Gateway - Cellular (HSPA+), Ethernet, serial (RS-232), 5 VPN tunnels and encryption. Includes: power supply, antennas  |
| DC-WAN-U901-W | Digi Connect WAN Routing Gateway - Cellular (HSPA+), Ethernet, serial (RS-232), 5 VPN tunnels and encryption. Includes: power supply, antennas. (International)                                   |
| DC-WAN-B101-A | Digi Connect WAN Routing Gateway - Cellular (1xRTT - Sprint), Ethernet, serial (RS-232), 5 VPN tunnels and encryption. Includes: power supply, antennas   |
| DC-WAN-B201-A | Digi Connect WAN Routing Gateway - Cellular (1xRTT - Verizon), Ethernet, serial (RS-232), 5 VPN tunnels and encryption. Includes: power supply, antennas  |
| DC-WAN-U905   | Digi Connect WAN IA - Cellular (HSPA+), Ethernet, serial (RS-232/RS422/RS485), 5 VPN tunnels and encryption, terminal block power connector. Includes: antennas, DIN rail mounting kit            |
| DC-WAN-B105   | Digi Connect WAN IA Routing Gateway - Cellular (1xRTT - Sprint), Ethernet, serial (RS-232/RS422/RS485), 5 VPN tunnels and encryption. Includes: No power supply, antennas, DIN rail mounting kit  |
| DC-WAN-B205   | Digi Connect WAN IA Routing Gateway - Cellular (1xRTT - Verizon), Ethernet, serial (RS-232/RS422/RS485), 5 VPN tunnels and encryption. Includes: No power supply, antennas, DIN rail mounting kit |

FOR MORE INFORMATION  
PLEASE VISIT [WWW.DIGI.COM](http://WWW.DIGI.COM)

**DIGI SERVICE AND SUPPORT** / You can purchase with confidence knowing that Digi is always available to serve you with expert technical support and our industry leading warranty. For detailed information visit [www.digi.com/support](http://www.digi.com/support).

© 1996-2015 Digi International Inc. All rights reserved.  
All trademarks are the property of their respective owners.

91001371  
H1/915

**DIGI INTERNATIONAL WORLDWIDE HQ**  
877-912-3444 / 952-912-3444 / [www.digi.com](http://www.digi.com)

**DIGI INTERNATIONAL FRANCE**  
+33-1-55-61-98-98 / [www.digi.fr](http://www.digi.fr)

**DIGI INTERNATIONAL JAPAN**  
+81-3-5428-0261 / [www.digi-intl.co.jp](http://www.digi-intl.co.jp)

**DIGI INTERNATIONAL SINGAPORE**  
+65-6213-5380

**DIGI INTERNATIONAL CHINA**  
+86-21-50492199 / [www.digi.com.cn](http://www.digi.com.cn)

[WWW.DIGI.COM](http://WWW.DIGI.COM) **DIGI**