



CUSTOMIZABLE
COMMERCIAL-GRADE
CELLULAR GATEWAYS



DIGI CONNECTPORT X4 FAMILY

Remote M2M networking gateways designed for commercial grade and rugged outdoor applications

ConnectPort® X4 customizable cellular M2M gateways offer a variety of LAN/WAN interface options for end-to-end networking of remote devices. The gateways include comprehensive IP protocols and IPSec VPN support for high-end routing and security. The easy DIA/Python development environment enables custom applications to run locally while interfacing across cellular networks for WAN connectivity to a centralized server.

ConnectPort X4 gateways feature a compact commercial-grade enclosure or an optional outdoors IP66/NEMA 4X enclosure.

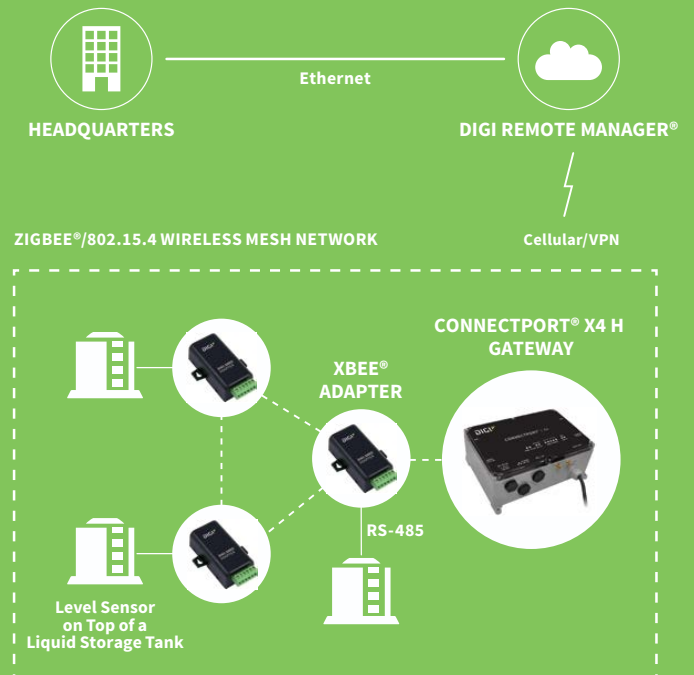
Interface options include Ethernet, serial and Zigbee/Rf for flexible connectivity to virtually any remote device.

All ConnectPort X4 gateways feature an end-to-end development environment using comprehensive Digi ESP™ IDE and DIA/Python programming languages. Digi Remote Manager® adds secure, scalable cloud-based management and web services integration for a complete remote asset platform across all locations.

BENEFITS

- WAN connectivity via LTE or 3G HSPA+ Networks
- Local wireless connectivity through Zigbee/802.15.4
- Local wired connectivity through RS-232/422/485, 2 analog inputs and 2 digital inputs
- Small commercial-grade enclosure or NEMA 4X/IP66 case
- Full routing/IP filtering plus IPsec/SSL VPNs with DES, 3DES or AES encryption
- Easy development environment via DIA and Python scripting as part of Digi ESP IDE
- Support for Modbus/Modbus TCP
- Digi Remote Manager® support for secure, scalable access to an unlimited number of remote assets
- Digi Foundations™ 1-, 3- or 5-year subscription available

APPLICATION EXAMPLE



RELATED PRODUCTS



Digi TransPort®
WR21



Digi TransPort®
WR31



Digi Connect®
Sensor



Digi Connect®
Tank



Digi Remote
Manager®

SPECIFICATIONS

ConnectPort® X4

| ConnectPort® X4 IA

| ConnectPort® X4 H

WIRELESS INTERFACES

WWAN**

| | | | |
|-----------------|---|-----|---|
| LTE CAT 1 | N/A | N/A | Verizon: bands 2,4,14 AT&T & T-Mobile: bands 2,4,5 with 3G/2G fallback |
| HSPA+ (U9) | 850/900/1700 (AWS)/1900/2100 MHz; Transfer rate (max): 5.76 Mbps up, 21 Mbps down | | |
| CDMA 1XRTT (BX) | 800/1900 MHz; Transfer rate (max): 153 Kbps up/down | | |
| CONNECTOR | 1 or 2 x SMA (center pin - on device: female; on antenna: male) | | 1 or 2 x SMA (center pin - on device: female; on antenna: male) |
| SIM SLOTS | 2 or 0 (CDMA variants) | | 1 |
| SIM SECURITY | SIM slot cover plate | | Internal SIM slot |

RF

| | | | |
|-----------|---|--|--|
| STANDARD | Zigbee (2.4 GHz), DigiMesh® (2.4 GHz or 900 MHz), Digi XBee-PRO® 900HP, 802.15.4 or 868 | | |
| CONNECTOR | 1 x RP-SMA (center pin - on device: male; on antenna: female) | | |

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 | DB-9 Male | | Screw-down terminal block |

ETHERNET

| | | | |
|----------------|------------------------------------|--|--|
| PORTS | 1 | | |
| STANDARD | IEEE 802.3 | | |
| PHYSICAL LAYER | 10/100 Base-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 | 2 analog and 2 digital | |
| CONNECTOR | N/A | Screw-down terminal block | |

USB

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

SOFTWARE/MANAGEMENT

| | | | |
|--------------------------|--|--|--|
| MANAGEMENT (CLOUD-BASED) | Digi Remote Manager® | | |
| 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) | | |

SPECIFICATIONS

ConnectPort® X4

| ConnectPort® X4 IA

| ConnectPort® X4 H

SOFTWARE/MANAGEMENT (CONTINUED)

| | |
|------------------------------------|--|
| 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 | 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 Digi 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 | 100-240 VAC | |
| CONSUMPTION | Idle: 1.5 W, Max: 10.4 W | Approx. 15 W | |
| PROTECTION | 4 kV burst (EFT) per-4-4, 2 kV surge per EN61000-4 | 2 kV burst (EFT) (with included power supply) | |
| CONNECTOR | Locking barrel | Compression terminal block | Pigtail AC power cord |
| DC POWER CORD* | Available upon request | N/A | 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 | Internal |
| BATTERY BACKUP | N/A | | |

PHYSICAL

| | | | |
|-------------------------------|---|--|---------------------------------------|
| DIMENSIONS (L X W X H) | 13.33 cm x 8.50 cm x 2.54 cm (5.25 in x 3.35 in x 1.00 in) | 240 mm x 160 mm x 95 mm (9.50 in x 6.25 in x 3.75 in) | |
| WEIGHT | 0.20 kg (0.44 lb) | 1.41 kg (3.10 lb) | |
| STATUS LEDS | Ethernet status, power, cellular link/activity, signal strength (4 bars), Digi XBee link/activity | Ethernet status, power, cellular link/activity, signal strength (5 bars), Digi XBee® link/activity | |
| ENCLOSURE MATERIAL | Industrial (metal) | NEMA 4X | |
| ENCLOSURE RATING | N/A | IP66 | |
| MOUNTING | Wall-mount bracket sold separately | DIN rail bracket included | 4x mounting feet on the unit's flange |

ENVIRONMENTAL

| | | | |
|-------------------------------------|---|--------------------------------|----|
| OPERATING TEMPERATURE *** | -30° C to 75° C (-22° F to 167° F) | | |
| STORAGE TEMPERATURE | -40 to 85C (-40° F to 185° F) | | |
| RELATIVE HUMIDITY | 5% to 95% (non-condensing) | N/A (enclosure is water-tight) | |
| 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 | No |

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 www.digi.com 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 | 3-year + Digi Foundations**** |
|-------------------------|-------------------------------|

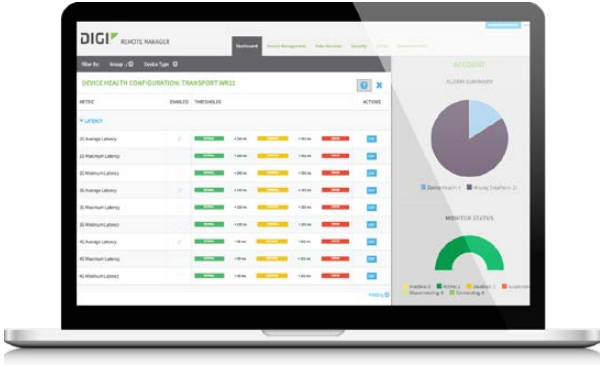
*Optional hardware

**Transfer rates are network operator dependent

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

****Digi Foundations can extend the standard three-year warranty to a Limited Lifetime Warranty that provides replacement with a new or similar Digi product for a period of five years from the date of purchase. After five years from the purchase date, the warranty value will revert to a 40 percent credit towards the MSRP of an equivalent product from Digi.

DIGI REMOTE MANAGER®



INFRASTRUCTURE

- Hosted in a commercial-grade SAS 70-certified environment
- Superior availability, operating to 99.9% or greater
- Open APIs available to support application development

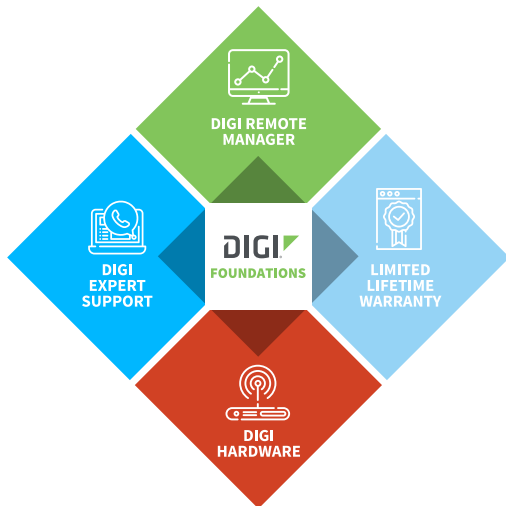
CAPABILITIES

- Centralized management of remote devices over 3G/4G LTE
- Define standard configurations and automatically monitor individual devices for PCI security compliance
- Report and alert on performance statistics, including connection history, signal quality, latency, data usage and packet loss
- No servers or applications to operate and maintain
- Complete tasks for your entire device network in minutes
- Edit configurations and update firmware for your individual devices or groups
- Monitor the status and location of your remote device via a web browser
- Active or deactivate cellular lines and monitor data to ensure you never incur overage charges

SECURITY

- Certified SSAE-16 facilities
- Member of the Cloud Security Alliance
- Over 175 security controls in place to protect your data
- Enables compliance with security frameworks like PCI, HIPAA, NIST and more
- Earned SkyHigh's Cloud Trust Program highest ranking of Enterprise-Ready

DIGI FOUNDATIONS™



IT'S TIME TO CONNECT WITH CONFIDENCE

The convenient, comprehensive and secure way to integrate IoT communications hardware, device management software, global support and lifetime warranty protection into a connectivity solution to simplify your IoT network growth.

- [Digi Remote Manager®](#) (DRM) gives you a single point of contact, command and control with sophisticated remote device monitoring and management tools.
- [Digi Expert Support](#) is available around the clock, seven days a week, around the world with experts ready to provide technical support by phone, email or online.
- [Digi Limited Lifetime Warranty](#) lowers the total cost of ownership with hardware protection and equipment upgrades to expand your network as needs evolve.

Digi Foundations, with DRM, simplifies network and device management – for hundreds or hundreds-of-thousands of Digi or third-party devices – with options to upgrade as technology evolves. Isn't it time you got better connected?

For more information visit: digi.com/foundations

| PART NUMBERS | DESCRIPTION |
|--|--|
| ConnectPort X4 H - Zigbee | |
| X4H-Z1U-L301-US | ConnectPort X4 H -Digi XBee Zigbee to Ethernet & cellular (LTE) |
| X4H-Z1U-B101-US | ConnectPort X4 H - Digi XBee Zigbee S2B to Ethernet & cellular (1xRTT Sprint) |
| ConnectPort X4 - Zigbee | |
| X4-Z11-E-A | ConnectPort X4 - Digi XBee Zigbee to Ethernet |
| X4-Z11-E-W | ConnectPort X4 - Digi XBee Zigbee to Ethernet (International) |
| X4-Z1J-U901-W | ConnectPort X4 - Digi XBee Zigbee to Ethernet & cellular (HSPA+) (International) |
| X4-Z1U-U901-A | ConnectPort X4 - Digi XBee Zigbee to Ethernet & cellular (HSPA+) |
| ConnectPort X4 - DigiMesh 2.4 GHZ | |
| X4-M11-U901-A | ConnectPort X4 - Digi XBee (Digi Mesh 2.4GHS) to Ethernet & cellular (HSPA+) |
| X4-M11-U901-W | ConnectPort X4 - Digi XBee (DigiMesh 2.4 GHz) to Ethernet & cellular (HSPA+) (International) |
| ConnectPort X4 - 900 MHZ | |
| X4-HMU-B201-A | ConnectPort X4 - Digi XBee (Digi XBee-PRO 900HP) to Ethernet & cellular (1xRTT Verizon) |
| X4-HMU-E-A | ConnectPort X4 - Digi XBee (Digi XBee-PRO 900HP) to Ethernet |
| X4-HMU-U901-A | ConnectPort X4 - Digi XBee (Digi XBee-PRO 900HP) to Ethernet & cellular (HSPA+) |
| ConnectPort X4 IA - Zigbee | |
| X4-Z1J-U905 | ConnectPort X4 IA - Digi XBee Zigbee to Ethernet & cellular (HSPA+) (International) |
| X4-Z1U-U905 | ConnectPort X4 IA - Digi XBee Zigbee to Ethernet & cellular (HSPA+) |
| ConnectPort X4 IA - 802.15.4 | |
| X4-A1J-U905 | ConnectPort X4 IA - Digi XBee (802.15.4) to Ethernet & cellular (HSPA+) (International) |
| X4-A1U-U905 | ConnectPort X4 IA - Digi XBee (802.15.4) to Ethernet & cellular (HSPA+) |

| DIGI FOUNDATIONS™ | AVAILABLE FOR DIGI CONNECTPORT X4 FAMILY |
|-------------------|---|
| DGF-BDL-STAN-1YR | Digi Foundations add-on, 1 year, includes Expert Support, Digi Remote Manager, and Limited Lifetime Warranty |
| DGF-BDL-STAN-3YR | Digi Foundations add-on, 3 years, includes Expert Support, Digi Remote Manager, and Limited Lifetime Warranty |
| DGF-BDL-STAN-5YR | Digi Foundations add-on, 5 years, includes Expert Support, Digi Remote Manager, and Limited Lifetime Warranty |

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.

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DIGI INTERNATIONAL WORLDWIDE HQ
877-912-3444 / 952-912-3444 / www.digi.com

DIGI INTERNATIONAL GERMANY
+49-89-540-428-0

DIGI INTERNATIONAL JAPAN
+81-3-5428-0261 / www.digi-intl.co.jp

DIGI INTERNATIONAL SINGAPORE
+65-6213-5380

DIGI INTERNATIONAL CHINA
+86-21-50492199 / www.digi.com.cn



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