



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

RELATED PRODUCTS



Digi TransPort®
WR21



Digi TransPort®
WR31



Digi Connect®
Sensor

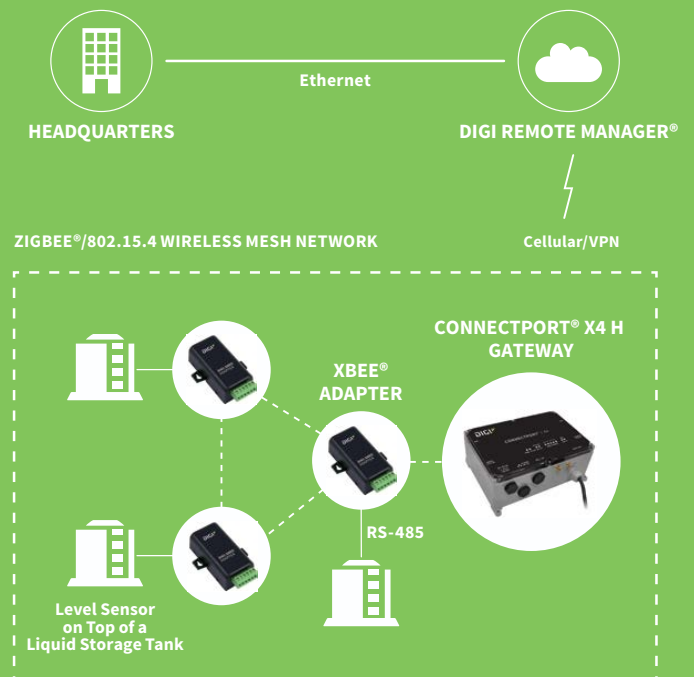


Digi Connect®
Tank



Digi Remote
Manager®

APPLICATION EXAMPLE



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****
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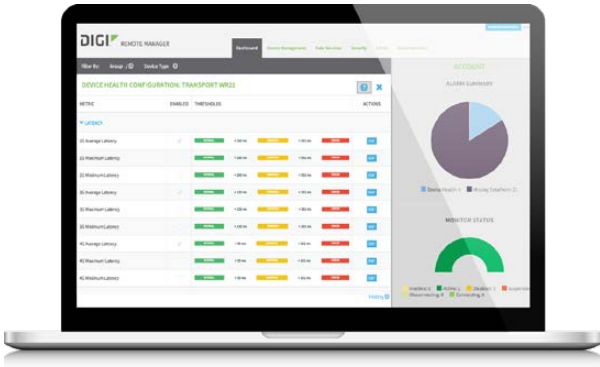
*Optional hardware

**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

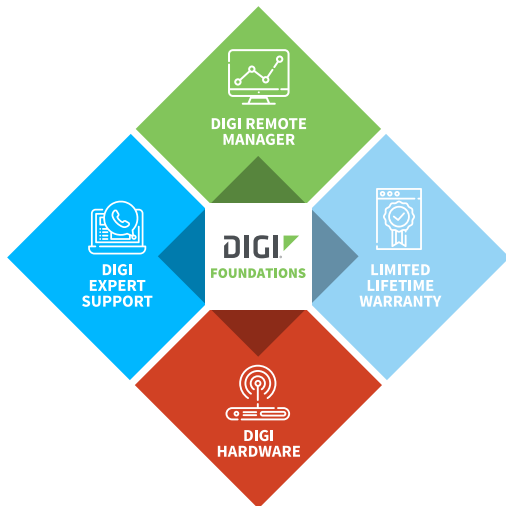
CAPABILITIES

- 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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