

# ConnectPort® X4 Family

Customizable Commercial-Grade 3G/4G Routing Gateways

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



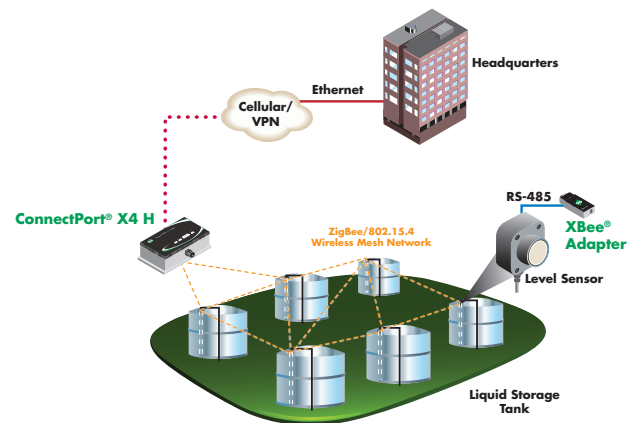
## Overview

ConnectPort X4 customizable 2G/3G/4G Gobi cellular/WiMAX M2M routing 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/WiMAX 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 with Class 1, Division 2 rating for more rugged applications. Interface options include Ethernet, serial and ZigBee/Rf for flexible connectivity to virtually any remote device.

All ConnectPort X gateways feature an end-to-end development environment using comprehensive Digi ESP™ IDE and DIA/Python programming languages. Device Cloud by Etherios™ add secure, scalable cloud based management and web services integration for a complete remote asset platform.

## Application Highlight



## Features/Benefits

- WAN connectivity via 2G/3G/4G Gobi GSM/CDMA/WiMAX networks
- Flexible interfaces: ZigBee/802.15.4, software selectable RS-232/422/485 serial and USB with optional Wi-Fi and 2 AIO/2 DIO
- Small commercial grade enclosure or NEMA 4X/IP66 case with Class 1, Division 2 certifications
- 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
- Device Cloud support for secure, scalable access to an unlimited number of remote assets

## Related Products and Services



Device Cloud Solutions



Dev Kits



Adapters



Network Extenders



Sensors



Digi ESP



www.digi.com

Specifications	ConnectPort® X4	ConnectPort® X4 IA	ConnectPort® X4 H
<b>Wireless Interfaces</b>			
<b>WWAN**</b>			
GSM/CDMA Gobi HSPA+ (U8)	HSPA+/EV-DO 800/850/900/1700 (AWS)/1900/2100 MHz Gobi with Rx Diversity		
Edge (E1)	GPRS/Edge 850/900/1800/1900 MHz		
CDMA 1xRTT (Bx)	1xRTT 800/1900 MHz		
WiMAX (Yx)	WiMAX (802.16e-2005); 2.3-2.7 GHz (WF3A Profile); Wave2; S-OFDMA MIMO; QPSK, 16 QAM, 64 QAM; 5/10 MHz bandwidth UL/DL	N/A	
Connector	1 or 2 x SMA (Center pin - on device: female; on antenna: male)	1 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	
<b>RF</b>			
Standard	ZigBee (2.4 GHz), DigiMesh (2.4 GHz or 900 MHz), 802.15.4 or 868		
Connector	1 x RP-SMA (Center pin - on device: male; on antenna: female)		
<b>Wi-Fi</b>			
Standard	802.11b/g	N/A	
Modes	Ad-hoc & AP Client Modes; Access Point Mode not supported		N/A
Connector	1 x RP-SMA (Center pin - on device: male; on antenna: female)	N/A	
<b>Other</b>			
Satellite	N/A		
GPS	N/A		
<b>Wired Interfaces</b>			
<b>Serial</b>			
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	Screw-down terminal block	
<b>Ethernet</b>			
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		

Specifications	ConnectPort® X4	ConnectPort® X4 IA	ConnectPort® X4 H
<b>Wired Interfaces (Continued)</b>			
<b>I/O</b>			
Ports	N/A		2 analog and 2 digital
Connector	N/A		Screw-down terminal block
<b>USB</b>			
Ports	1		
Standard	USB 1.1		
Signaling	Full-speed		
Connector	Type A		
<b>Other</b>			
Sensor	N/A	1 sensor port for use with Watchport® sensors	N/A
<b>Software/Management</b>			
Management (Cloud-based)	Device 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)		
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 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		
<b>Power</b>			
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		

Specifications	ConnectPort® X4	ConnectPort® X4 IA	ConnectPort® X4 H
<b>Physical</b>			
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)		9.50 in x 6.25 in x 3.75 in (240 mm x 160 mm x 95 mm)
Weight	0.44 lb (0.20 kg)		3.10 lb (1.41 kg)
Status LEDs	Ethernet status, Power, Cellular link/activity, Signal strength (4 bars), XBee link/activity, Wi-Fi link/activity		Ethernet status, Power, Cellular link/activity, Signal strength (5 bars), 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
<b>Environmental</b>			
Operating Temperature ***	-30° C to +75° C (-22 F to +167 F)		
Storage Temperature	-40 to +85C		
Relative Humidity	5% to 95% (non-condensing)		N/A (enclosure is water-tight)
Ethernet Isolation	1500VAC 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
Conformal Coating	N/A		
<b>Approvals</b>			
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		
<b>Warranty</b>			
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.

Visit [www.digi.com](http://www.digi.com) for part numbers.

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**Digi International  
Worldwide HQ**

877-912-3444  
952-912-3444

**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)

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[info@digi.com](mailto:info@digi.com)

