

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.

Related Products and Services



Device Cloud Solutions



Dev Kits



Adapters



Network Extenders

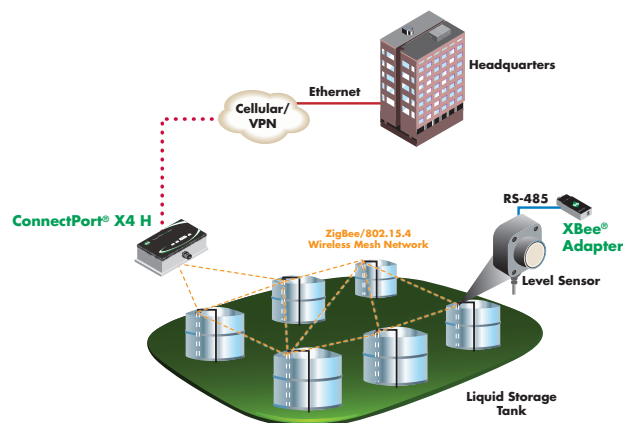


Sensors



Digi ESP

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



Specifications		ConnectPort® X4	ConnectPort® X4 IA	ConnectPort® X4 H
Wireless Interfaces				
WWAN**				
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
RF				
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)			
Wi-Fi				
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
Other				
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			Screw-down terminal block
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			

Specifications		ConnectPort® X4	ConnectPort® X4 IA	ConnectPort® X4 H
Wired Interfaces (Continued)				
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			
Other				
Sensor	N/A	1 sensor port for use with Watchport® sensors	N/A	
Software/Management				
Management (Cloud-based)	Device Cloud by Etherios			
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			
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			

Specifications		ConnectPort® X4	ConnectPort® X4 IA	ConnectPort® X4 H
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)		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
Environmental				
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			
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	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 for part numbers.

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