



CUSTOMIZABLE
COMMERCIAL-GRADE
2G/3G ROUTING
GATEWAYS



CONNECTPORT® X4 FAMILY

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

ConnectPort X4 customizable 2G/3G cellular 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 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. Digi Device Cloud™ add secure, scalable cloud based management and web services integration for a complete remote asset platform.

BENEFITS

- WAN connectivity via 2G/3G GSM/CDMA networks
- Flexible interfaces: ZigBee/802.15.4, software selectable RS-232/422/485 serial and USB 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
- Digi Device Cloud support for secure, scalable access to an unlimited number of remote assets

RELATED PRODUCTS



ConnectPort®
X2



XBee® ZigBee
Gateway



Digi Connect®
WAN

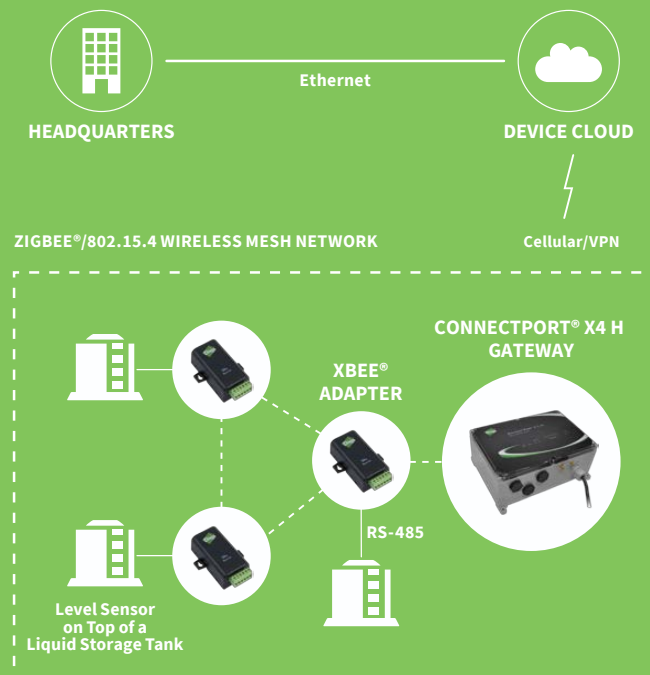


Digi TransPort®
WR11



Digi TransPort®
WR21

APPLICATION EXAMPLE



SPECIFICATIONS		ConnectPort® X4		ConnectPort® X4 IA	ConnectPort® X4 H
WIRELESS INTERFACES					
WWAN**					
HSPA+ (U9)	850/900/1700 (AWS)/1900/2100 MHz; Transfer rate (max): 5.76 Mbps up, 21 Mbps down				
EDGE (E1)	GPRS/EDGE Class 10; 850/900/1800/1900 MHz; Transfer rate (max): 236 Kbps up/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 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), XBee-PRO® 900HP, 802.15.4 or 868				
CONNECTOR	1 x RP-SMA (Center pin - on device: male; on antenna: female)				
OTHER					
SATELLITE	N/A				
GPS	N/A				
WI-FI	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	DB-9 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				
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)	Digi Device Cloud SM				
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 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)	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		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	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
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.

PART NUMBERS	DESCRIPTION
ConnectPort X4 - ZigBee	
X4-Z11-A01-A	ConnectPort X4 - XBee ZigBee to Ethernet & Cellular (Edge)
X4-Z11-A01-W	ConnectPort X4 - XBee ZigBee to Ethernet & Cellular (Edge) (International)
X4-Z11-E-A	ConnectPort X4 - XBee ZigBee to Ethernet
X4-Z11-E-W	ConnectPort X4 - XBee ZigBee to Ethernet (International)
X4-Z1J-U901-W	ConnectPort X4 - XBee ZigBee to Ethernet & Cellular (HSPA+) (International)
X4-Z1U-B101-A	ConnectPort X4 - XBee ZigBee to Ethernet & Cellular (1xRTT Sprint)
X4-Z1U-B201-A	ConnectPort X4 - XBee ZigBee to Ethernet & Cellular (1xRTT Verizon)
X4-Z1U-U901-A	ConnectPort X4 - XBee ZigBee to Ethernet & Cellular (HSPA+)
ConnectPort X4 - DIGIMESH 2.4 GHZ	
X4-M11-A01-A	ConnectPort X4 - XBee (DigiMesh 2.4 GHz) to Ethernet & Cellular (Edge)
X4-M11-A01-W	ConnectPort X4 - XBee (DigiMesh 2.4 GHz) to Ethernet & Cellular (Edge) (International)
X4-M11-B201-A	ConnectPort X4 - XBee (DigiMesh 2.4 GHz) to Ethernet & Cellular (1xRTT Verizon)
X4-M11-E-A	ConnectPort X4 - XBee (DigiMesh 2.4 GHz) to Ethernet
X4-M11-E-W	ConnectPort X4 - XBee (DigiMesh 2.4 GHz) to Ethernet (International)
X4-M11-U901-W	ConnectPort X4 - XBee (DigiMesh 2.4 GHz) to Ethernet & Cellular (HSPA+) (International)
ConnectPort X4 - 802.15.4	
X4-A11-A01-A	ConnectPort X4 - XBee (802.15.4) to Ethernet & Cellular (Edge)
X4-A11-A01-W	ConnectPort X4 - XBee (802.15.4) to Ethernet & Cellular (Edge) (International)
X4-A11-E-A	ConnectPort X4 - XBee (802.15.4) to Ethernet
X4-A11-E-W	ConnectPort X4 - XBee (802.15.4) to Ethernet (International)
X4-A1J-U901-W	ConnectPort X4 - XBee (802.15.4) to Ethernet & Cellular (HSPA+) (International)
X4-A1U-U901-A	ConnectPort X4 - XBee (802.15.4) to Ethernet & Cellular (HSPA+)
ConnectPort X4 - 868 MHZ	
X4-P8J-U901-W	ConnectPort X4 - XBee (XBee 868LP) to Ethernet & Cellular (HSPA+) (International)
ConnectPort X4 - 900 MHZ	
X4-HMU-B201-A	ConnectPort X4 - XBee (XBee-PRO 900HP) to Ethernet & Cellular (1xRTT Verizon)
X4-HMU-E-A	ConnectPort X4 - XBee (XBee-PRO 900HP) to Ethernet
X4-HMU-U901-A	ConnectPort X4 - XBee (XBee-PRO 900HP) to Ethernet & Cellular (HSPA+)
X4-HMA-U901-AU	ConnectPort X4 - XBee (XBee-PRO 900HP) to Ethernet & Cellular (HSPA+) (Australia)
X4-Z11-P01-A	ConnectPort X4 IA - XBee ZigBee to Ethernet & Cellular (Edge)
ConnectPort X4 H - ZigBee	
X4H-Z1U-B101-US	ConnectPort X4 H - XBee ZigBee S2B to Ethernet & Cellular (1xRTT Sprint)
X4H-Z1U-B201-US	ConnectPort X4 H - XBee ZigBee S2B to Ethernet & Cellular (1xRTT Verizon)
X4H-Z1U-U901-US	ConnectPort X4 H - XBee ZigBee S2B to Ethernet & Cellular (HSPA+)
X4-Z11-A01H-EU	ConnectPort X4 H - XBee ZigBee to Ethernet & Cellular (Edge), EU power cord (International)
X4-Z11-A01H-UK	ConnectPort X4 H - XBee ZigBee to Ethernet & Cellular (Edge), UK power cord (International)
X4-Z11-A01H-US	ConnectPort X4 H - XBee ZigBee to Ethernet & Cellular (Edge), US power cord
ConnectPort X4 H - 900 MHZ	
X4H-HMU-U901-US	ConnectPort X4 H - XBee (XBee-PRO 900HP) to Ethernet & Cellular (HSPA+)
ConnectPort X4 IA - ZigBee	
X4-Z11-P01-A	ConnectPort X4 IA - XBee ZigBee to Ethernet & Cellular (Edge)
X4-Z11-P01-W	ConnectPort X4 IA - XBee ZigBee to Ethernet & Cellular (Edge) (International)
X4-Z11-PE-A	ConnectPort X4 IA - XBee ZigBee to Ethernet
X4-Z11-PE-W	ConnectPort X4 IA - XBee ZigBee to Ethernet (International)
X4-Z1J-U905	ConnectPort X4 IA - XBee ZigBee to Ethernet & Cellular (HSPA+) (International)
X4-Z1U-B105	ConnectPort X4 IA - XBee ZigBee to Ethernet & Cellular (1xRTT Sprint)
X4-Z1U-B205	ConnectPort X4 IA - XBee ZigBee to Ethernet & Cellular (1xRTT Verizon)
X4-Z1U-U905	ConnectPort X4 IA - XBee ZigBee to Ethernet & Cellular (HSPA+)
ConnectPort X4 IA - 802.15.4	
X4-A11-P01-A	ConnectPort X4 IA - XBee (802.15.4) to Ethernet & Cellular (Edge)
X4-A11-P01-W	ConnectPort X4 IA - XBee (802.15.4) to Ethernet & Cellular (Edge) (International)
X4-A1J-U905	ConnectPort X4 IA - XBee (802.15.4) to Ethernet & Cellular (HSPA+) (International)
X4-A1U-U905	ConnectPort X4 IA - XBee (802.15.4) to Ethernet & Cellular (HSPA+)
ConnectPort X4 IA - 868 MHZ	
X4-P8J-U905	ConnectPort X4 IA - XBee (XBee 868LP) to Ethernet & Cellular (HSPA+) (International)

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