



# ConnectPort® X5 Family

Data sheet



## ConnectPort® X5 Family

### Rugged Wireless PAN to IP Gateways

Rugged telematics gateway for Vehicle Area Network (VAN) traffic, such as ZigBee and 802.15.4 point-to-multipoint, for IP connectivity using cellular or Wi-Fi connections.



#### Overview

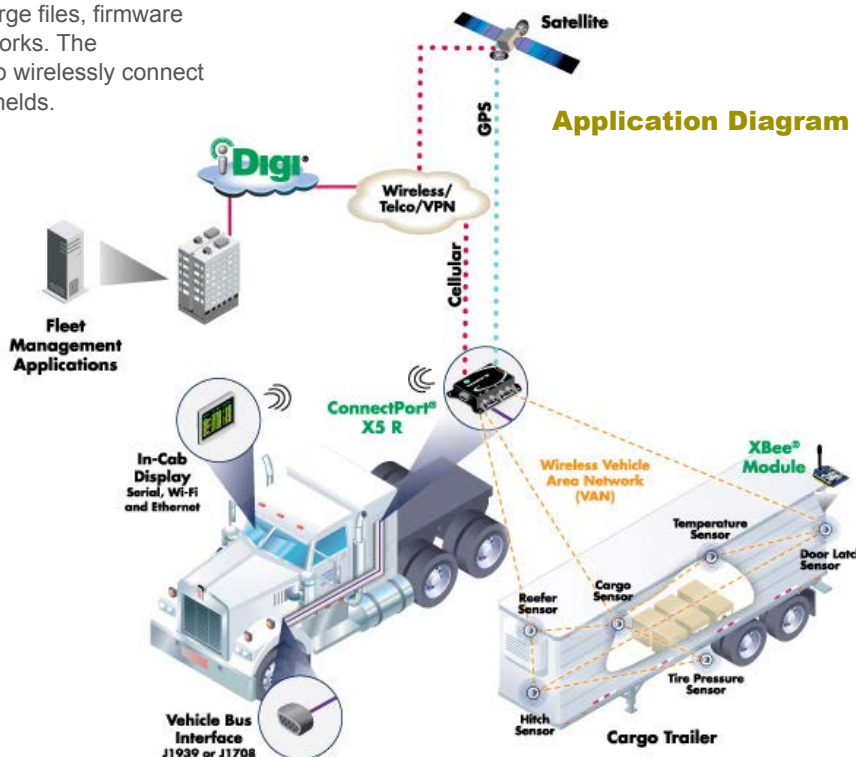
The ConnectPort X5 family offers the industry's smallest Quint-Mode (cellular, satellite, GPS, Wi-Fi, Vehicle Area Network) wireless telematics product. These gateways provide remote connectivity to mobile assets to monitor operating health, performance, location and driver/operator behavior, as well as to enable automated event reporting.

Two models are available – the ConnectPort X5 R and the ConnectPort X5 Fleet. Both products support Vehicle Area Networks (VANs) with Digi's industry leading XBee® 802.15.4/ZigBee or Point-to-Multipoint 2.4 GHz radio technology.

The ConnectPort X5 family offers cellular, Wi-Fi and satellite for flexible WAN connectivity. Cellular provides instant/always-on communications, while Wi-Fi provides a cost effective way to transfer large files, firmware or logs across "low-cost" secure public or private networks. The ConnectPort X5 Wi-Fi functionality can also be used to wirelessly connect peripheral devices such as vehicle displays and handhelds.

#### Features/Benefits

- Automated event reporting – unit can continuously transmit vehicle status at user-defined intervals
- Factory sealed enclosure with IP67 and SAE1455 certifications
- J1939 CAN interface with J1708 serial connectivity support
- Advanced power management functionality
- Global coverage over satellite or cellular (GSM/GPRS or CDMA) networks
- 3-axis accelerometer to detect movement, driver behavior and accident conditions





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## Specifications

	ConnectPort® X5 R	ConnectPort® X5 Fleet
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### General

Management	iDigi® and/or WebUI	
Software	Python, iDigi, iDigi® Dia	
Protocols	UDP/DHCP, SNMPv1/v2	
Memory	Total: 16 MB Flash, 32 MB RAM; Available user space: ~5.5 MB Flash, ~18 MB RAM (without iDigi Dia) / ~15 MB RAM (with iDigi Dia)	
LEDs	Power, User, Cellular link/activity, Signal strength (3 bars), GPS, XBee®, Ethernet, Wi-Fi	
Security	SSL tunnels, SSHv2, FIPS 197 (serial port)	
VPN	IPsec with IKE/ISAKMP; Multiple tunnel support; DES, 3DES and up to 256-bit AES encryption; VPN pass-through, GRE forwarding	
Dimensions (L x W x H)	5.5 in x 7.5 in x 1.8 in (14.0 cm 19.0 x cm x 4.6 cm)	10.5 in x 8.0 in x 5.0 in (26.67 cm x 20.32 cm x 12.7 cm)
Weight	2.2 lb (1.0 kg)	4.4 lb (2.0 kg)

### Antennas

XBee	7" dipole	Internal
Combination Cellular/ GPS	Surface Mount, 3 m cable	Internal
Satellite	Mag mount 15' cable	Internal
Wi-Fi	Surface mount, 10' cable	Internal
Connector Type (on Gateway)	50 Ω TNC, Standard polarity for cellular, Reverse polarity for Wi-Fi, GPS, XBee	N/A

### Interfaces

Cellular	GSM/GPRS	
XBee (Low-Power RF)	Optional XBee-PRO® module; XBee ZB (ZigBee) and XBee 802.15.4 versions available	
Serial	1 RS-232 (4-Wire) with 115.2 Kbps throughput	
Ethernet	1 RJ-45 10 Mbps 10Base-T; Full or Half duplex	
GPS	SBAS enabled; 50 channels; Time-To-First-Fix on cold start: 29 s; Horizontal position accuracy: 2.0 m; Velocity accuracy: 515 m/s	
Accelerometer	3 Axis	
Vehicle Bus	J1939 and J1708, wired or wireless via 3rd-party adapters	
I/O	2 DIO, 1 ignition sense	

### Wi-Fi (802.11b/g)

Frequency/Data Rate	2.4 GHz; Up to 54 Mbps w/fallback	
Transmit Power/ Receiver Sensitivity	802.11g (16 dBm @ 6 Mbps, 12 dBm @54 Mbps); -82 dBm @ 11 Mbps	
Modes	Ad-hoc, AP Client and Infrastructure modes	

### Satellite

Satellite	Optional Iridium; Message size: 100-200 bytes; Latency: 30 s typical / 2 min max	Optional ORBCOMM; Message size: 6-8 Kbytes; Latency: 3 min typical / 15 min max
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### Power Requirements

Power Input/Power Supply	9-48 VDC; +12/24 V battery
Power Consumption	Idle: 4 W; Peak: 12 W; Sleep: 60 mW

### Environmental/Regulatory Approvals

Environmental	IP67 and SAE1455 certified
Operating Temperature	-40° C to +70° C (-40° F to +158° F)
Safety	UL 60950-1, EN 60950-1, CSA 22.2 No. 60950, UL 60950-22, EN 60950-22
EMC	CE, FCC PART 15 (Class B), SAE/ISO automotive testing

\* Serial & I/O are model-dependent. Choose from I/O + XBee, RS-232 + XBee, or XBee only models. | \*\* Solar variant may req -20° to +50° C for optimal performance. | \*\*\* Avail on X3 and X3 H w/