ConnectPort® X5 R

Rugged Wireless PAN to IP Gateway

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

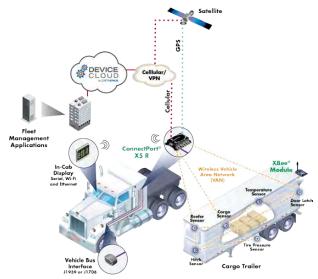
The ConnectPort X5 R offers the industry's smallest Quint-Mode (cellular, satellite, GPS, Wi-Fi, Vehicle Area Network) wireless telematics product. The gateway provides remote connectivity to mobile assets to monitor operating health, performance, location and driver/operator behavior, as well as to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

The ConnectPort X5 R supports Vehicle Area Networks (VANs) with Digi's industry leading XBee(R) 802.15.4/ZigBee or Point-to-Multipoint 2.4 GHz radio technology.

The ConnectPort X5 R 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 R Wi-Fi functionality can also be used to wirelessly connect peripheral devices such as vehicle displays and handhelds.

Related Products Device Cloud Solutions Dev Kits Dev Kits Dev Modules

Application Highlight



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



Specifications	ConnectPort® X5 R
General	
Management	Device Cloud and/or WebUI
Software	Python, Device Cloud by Etherios™, 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 Device Cloud DIA) / ~15 MB RAM (with
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, VPN pass-through, GRE forwarding
Device Connector	Tyco 23-pin
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)
Weight	2.2 lb (1.0 kg)
Antennas	
XBee	7" dipole; RP-TNC (Center pin - on device: male; on antenna: female)
Combination Cellular/GPS	Adhesive mount, 3m cable; TNC (Center pin - on device: female; on antenna: male)
Satellite	Magnetic mount, 15' cable; TNC (Center pin - on device: female; on antenna: male)
Wi-Fi	Surface mount, 10' cable; RP-TNC (Center pin - on device: male; on antenna: female)
Connector Type (on Gateway)	50 Ω TNC, Standard polarity for cellular, Reverse polarity for Wi-Fi, GPS, XBee
Interfaces	
Cellular	GSM/GPRS/CDMA, 1xRTT Sprint Field accessible SIM access via SIM cover (GSM/GPRS only)
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
Satellite	Optional Iridium; Message size: 100-200 bytes; Latency: 30 s typical / 2 min max
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	802.11b/g (16 dBm @ 6 Mbps, 12 dBm @54 Mbps); -82 dBm @ 11 Mbps
Modes	Ad-hoc, AP Client and Infrastructure modes
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

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

91001562 C4/513

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