

Manage this device with X-ON cloud IoT platform

DIGI XBEE INTELLIGENT EDGE CONTROLLER

Cloud-managed LPWAN smart industrial IoT solution for edge sensors and systems

Digi XBee® Intelligent Edge Controller provides a development-ready upgrade to existing industrial sensors with the latest innovation in wireless and cloud technologies. Combine Digi X-ON cloud with Digi XBee Intelligent Edge Controller to monitor sensor or remote-control assets over LoRaWAN. Industrial devices can be monitored with sub-second accuracy. Alarms and data are wirelessly delivered to the Digi X-ON cloud.

Provision and verify secure wireless connectivity with the Digi X-ON mobile app. Add custom workflows to streamline the installation process in the field. Deploy pre-configured device templates from the cloud with support for over-the-air configuration updates.

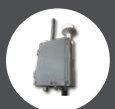
Leverage the complete, deployment-ready device-to-cloud XBee Intelligent Edge Controller IoT solution for sensor monitoring and real-time data insights. Ideal for predictive maintenance, the remotely configurable edge controller lowers network and operational costs with rapid deployment and secure, long-range connectivity. Local edge monitoring of up to 80 different parameters eliminates site visits with cloud management. Retrofit existing Modbus or analog industrial sensors in the field, configure Modbus device settings remotely, and reduce network traffic by over 99%.

Digi XBee Intelligent Edge Controller is a turnkey solution for intelligent agent edge processing, rapid polling, and long-range, low-power wireless connectivity with mobile provisioning and cloud control.

BENEFITS

- Low-Power Wide-Area Network - LPWAN
- 80x local intelligent edge rules and unlimited cloud-based rules
- Cloud-based configuration
- On-demand cloud polling and configuration for any Modbus register
- Device portal
- Intelligent edge processing
- Sub-second local monitoring and alarms
- Mobile provisioning app
- Digi X-ON cloud platform for easy management
- Typical range up to 15 km (10 miles)

RELATED PRODUCTS



Digi HX20 Gateways



Digi XBee 3 Cellular



Digi X-ON Cloud



Accessories



Bundle Services

APPLICATION EXAMPLE



SPECIFICATIONS

Digi XBee® Intelligent Edge Controller

LPWAN

LORAWAN REGIONAL SUPPORT	US915
ANTENNA CONNECTOR	U.FL (for IEC-9-LR-O-PCA model)

MANAGEMENT

CONFIGURATION AND MANAGEMENT	Digi X-ON cloud (cloud-based); local USB to serial CLI
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POWER (Does not include power draw of external sensors)

EXTERNAL POWER INPUT RANGE	5 VDC to 24 VDC
MAXIMUM DC INPUT	30 V
BATTERY AND BATTERY LIFE	3.6 V, 8 Ah, lithium thionyl chloride, non-rechargeable, replaceable; approximately 8 years (@ 10 msgs / day)
POWER CONSUMPTION — SLEEPING	30 uA (battery)
POWER CONSUMPTION — CONTINUOUS	8 mA (battery)
POWER CONSUMPTION — TRANSMIT	135 mA (battery)

SENSOR PROTOCOL SUPPORT

MODBUS	Modbus RTU RS-485 up to 32 devices direct or 192 devices with Modbus RTU I/O port expanders
EDGE COMPUTE	80 local rules, unlimited cloud rules

ANALOG I/O

INPUTS	1x 4-20 mA with 24 V power on battery or 5-24 V when on external DC
INPUT VOLTAGE RANGE	0-3.3 V (analog input)
INPUT CURRENT RANGE	4-20 mA (current loop input)
INTERNAL A/D CONVERTER	12-bit

DIGITAL I/O

PORTS	1x RS-485/Modbus, 1x I2C or 4x Digital I/O
INPUT RANGE	0-0.6 VDC logic low; 3.3 VDC logic high
MAX INPUT VOLTAGE	30 VDC
DIGITAL OUTPUT	Latching relay, max current, 2 A 0-150 VDC / 0-240 VAC

ENVIRONMENTAL

OPERATING TEMPERATURE	-35° C to 70° C (-31° F to 158° F)
STORAGE TEMPERATURE	-40° C to 85° C (-40° F to 185° F)
RELATIVE HUMIDITY	90%
BATTERY DISCHARGE	<1% per year if stored at 30° C (86° F)

PHYSICAL

	IEC-9-LR-O-001	IEC-9-LR-O-002	IEC-9-LR-O-PCA
DIMENSIONS (L x W x H)	152.4 mm x 108.4 mm, 127 mm including glands, x 74.6 mm (6 in x 4.27 in, 5 in including glands, x 2.94 in)	152.4 mm x 108.4 mm, 127 mm including glands, x 74.6 mm (6 in x 4.27 in, 5 in including glands, x 2.94 in)	86.3 mm x 79.6 mm (3.4 in x 3.13 in)
WEIGHTS	246 g (0.54 lb)	264 g (0.58 lb)	45 g (0.10 lb)
ENCLOSURE	IP65	IP65	PCA only (no enclosure)

REGULATORY APPROVALS

EMISSIONS	FCC part 15 Subpart B class B, EN55022: 2010/AC: 2011 class B, ICES-003 Issue 5: 2012 class B
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WARRANTY

PRODUCT WARRANTY	1-year*
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*Standard 1-year warranty upgradeable to 3 years with purchase of a Digi X-ON 3-year subscription applicable to the product purchased at time of first installation.

PART NUMBERS

DIGI XBEE® INTELLIGENT EDGE CONTROLLER

IEC-9-LR-O-001	Digi XBee Intelligent Edge Controller — LoRaWAN, Modbus, DIO, 4-20 mA, 902-928 MHz, 5-24 VDC, U.FL, 1.2 dBi omni antenna, IP65, no battery
IEC-9-LR-O-002	Digi XBee Intelligent Edge Controller — LoRaWAN, Modbus, DIO, 4-20 mA, 902-928 MHz, 5-24 VDC, tilt/shock sensor, U.FL, 1.2 dBi omni antenna, IP65, no battery
IEC-9-LR-O-PCA	Digi XBee Intelligent Edge Controller — LoRaWAN, Modbus, DIO, 4-20 mA, 902-928 MHz, 5-24 VDC, U.FL connector, PCA only

*Antennas and accessories sold separately unless otherwise noted.

FOR MORE INFORMATION
PLEASE VISIT [DIGI.COM](https://www.digi.com)

The information provided in this document is preliminary and may be subject to change without notice.

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