



# Digi HX20 Gateway for LoRaWAN<sup>®</sup>

Rugged, modular gateway for outdoor LoRaWAN IoT networks

The **Digi HX20 Gateway** delivers carrier-grade coverage for LoRaWAN<sup>®</sup> IoT networks and applications in a ruggedized IP67 enclosure built for outdoor and industrial use.

Designed for simplified gateway deployment, Digi HX20 offers high receiver sensitivity to support thousands of LoRaWAN IoT devices, and is suitable for both public and private IoT networks. The Digi HX20 Gateway can be installed quickly and easily with auto-connect and auto-configure features through the **Digi X-ON™** IoT platform.

Optional LTE cellular connectivity expands functionality and integration with enterprise cloud services and support. Digi X-ON scan-and-go mobile provisioning streamlines the installation and configuration process. Easily add external power options including solar or PoE for added resilience on remote deployments.

Quickly install the Digi HX20 Gateway with a single cable using PoE, included pole mounting kit and antenna, and auto-connect to the Digi X-ON IoT platform. Complex sense and control functions can be operated independently of cloud connectivity for high reliability and low latency, and Secure Boot OS with AES encryption adds levels of threat protection.

The Digi HX20 Gateway is industrial temperature-rated for superior reliability in harsh environments, with up to 27 dB transmit power and a +3 dBi omnidirectional antenna.

LoRa (Long Range) Wide Area Network (WAN) solutions from Digi deliver the flexible, affordable capabilities of LoRaWAN networking, with a complete end-to-end solution that you can deploy today.

## Key features, benefits and applications

- Ruggedized IP67 industrial-rated enclosure
- Simple gateway deployment for LoRaWAN and IoT applications
- Capacity for up to 1.5 million messages per day
- Modular design to support multiple frequency bands
- **Digi X-ON** IoT configuration and management
- High sensitivity receiver design for thousands of devices
- GPS localizations (outdoor), pole mounting kit and antenna included
- Scan-and-go provisioning with web-based mobile scanning app
- Status LEDs for LoRa TX and RX, cellular signal strength, Ethernet connection, power
- Optional LTE cellular connectivity (region-specific)
- Nano (4FF) SIM included on LTE gateways

### Application Example



## Related Digi industrial IoT software and solutions



Digi HX15 Gateway



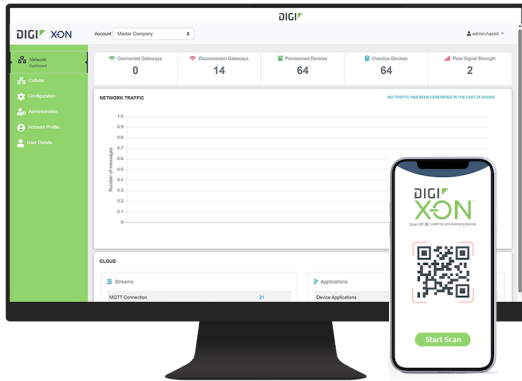
Digi XBee LR RF for LoRaWAN



Digi Intelligent Edge Controller



Digi X-ON



**Digi X-ON** is a complete device-to-cloud platform for connected IoT devices. The platform provides a data-ready device solution from development to operation. Digi X-ON contains an integrated LoRaWAN network server and JOIN server to support devices and gateways that use the LoRaWAN wireless connectivity standard. Digi X-ON also contains a web server for hosting web applications and platform management services. Digi X-ON with LoRaWAN provides cloud-enabled secure, long-range and low-power wireless connectivity for self-built or commercial off-the-shelf LoRaWAN devices.

The Digi X-ON platform is designed to collect and analyze data directly from devices and manage the wireless network base stations that provide campus, city or nationwide coverage. Digi X-ON and LoRaWAN support many different applications and use cases such as connected cities, smart utility, industrial IoT and smart agriculture.

Learn more at [digi.com/x-on](http://digi.com/x-on).

### Capabilities

- Enables you to configure, monitor and diagnose your mission-critical devices or gateways from the Digi X-ON web and mobile interface
- Automates deployment of devices and gateways with the provisioning app
- The Stream feature provides inter-cloud API support for real-time two-way device data between multiple cloud platforms
- Data templates include Transform functions for simplified integration of device data to multiple cloud platforms, including support for MQTT, WebSocket and cloud service providers including Microsoft Azure® and Amazon Web Services (AWS)
- Provides a multi-tenant hierarchy of accounts for OEMs, resellers and end users for managing complex business structures with role-based access controls
- Users can create comprehensive IoT applications by utilizing the X-ON platform AppEngine
- Provides advanced scheduling for events or timers for proactive maintenance, automated business operations and process control
- Enables real-time alerts and notifications with email, SMS or API
- Provides on-demand or scheduled reporting with business insights, network health or custom reports
- Enables logging and tracing of real-time data messages for interactive operations and troubleshooting with devices and gateways
- Lets you integrate data through open APIs to develop more complex applications with third-party utilities
- Ability to configure custom triggers using the intuitive IEC Configuration Tool

### Infrastructure

- Hosted in a commercial-grade cloud server environment that meets SOC 1®, SOC 2® and SOC 3® standards
- Superior availability, operating to 99.9% or greater with N+1 high-availability microservices
- Open APIs available to support application development
- Auto-scale elastic capacity 2M devices/min, 20k gateways/min, 6k users/min

### Security

- TLS PKI security across all applications
- Member of the Center for Internet Security® (CIS®)
- AES encryption for LoRaWAN

DIGI HX20 GATEWAY FOR LORAWAN

Product Photos

Digi HX20 Gateway for LoRaWAN



Digi HX20 Gateway for LoRaWAN — front



Digi HX20 Gateway for LoRaWAN — bottom



Digi HX20 Gateway for LoRaWAN — top



Digi HX20 Gateway for LoRaWAN — left



Digi HX20 Gateway for LoRaWAN — right



## DIGI HX20 GATEWAY FOR LORAWAN

# Specifications



Manage this device with  
Digi X-ON IoT platform

Specifications	Digi HX20 Gateway (US915)	Digi HX20 Gateway (EU868)
<b>X-ON OPTIMIZED DEPLOYMENT</b>		
REMOTE MANAGEMENT	Digi X-ON IoT platform (30-day trial subscription included with Digi HX20 Gateway)	
SCAN-AND-GO MOBILE PROVISIONING	Streamlines gateway deployment by automating provisioning, minimizing manual configuration time and errors	
AUTO-CONNECT AND CONFIGURATION	Enables dynamic connection to LoRaWAN network services with auto-configuration for immediate operation out of the box	
CONTINUOUS MONITORING INTERFACE	Provides real-time device diagnostics and network health metrics accessible via web and mobile dashboards	
SYSTEM	API management; auto-discovery over IP	
TOOLS	System monitor, logging, radio configuration, remote software upgrade	
NETWORKING	IPv4, IPv6, AES 256-bit, DHCP	
<b>SYSTEM</b>		
APPLICATION PROCESSOR	Digi ConnectCore® MP157 dual 650 MHz	
OPERATING SYSTEM	Digi Embedded Yocto Linux®	
MEMORY	512 MB RAM and 4 GB eMMC Flash	
<b>INTERFACES</b>		
ETHERNET	RJ-45 (PoE), 10/100/1000 M; IEEE 802.3af PoE supports 48 V DC input at up to 15.4 W per IEEE 802.3af standard, allowing both data and power delivery over a single Ethernet cable. Compatible with standard 802.3af-compliant PoE switches and injectors for streamlined deployment with typical Ethernet infrastructure.	
CELLULAR	LTE Cat 1 modem supporting data rates up to 10 Mbps downlink, 5 Mbps uplink	
SUPPORTED BANDS	LTE: B2, B4, B12; 3G: B2, B4, B5	LTE: B1, B3, B7, B8, B20, B28A; 3G: B1, B8; 2G: EGSM900, DCS1800
LTE SIM	Nano SIM (4FF), pre-activated SIM card included on LTE gateways	
CELLULAR ANTENNAS	LTE, 3G (dual internal patch), omni-directional	LTE, 3G, 2G (dual internal patch), omni-directional
GPS/GNSS	Internal ceramic patch with LNA	
<b>LORA SPECIFICATIONS</b>		
REGIONAL BANDS	US915	EU868
MAX TX POWER	+27 dBm	+14 dBm
RX SENSITIVITY	-138 dBm	
CHANNELS	8 Rx / 1 Tx	
LORA ANTENNA	3 dBi (N-type), omni-directional	
<b>POWER</b>		
POWER INPUT	PoE (15.4 W), IEEE 802.3af-2003 compliant, 48 VDC (typical)	
POWER CONSUMPTION	5 W (typical)	
<b>ENVIRONMENTAL</b>		
OPERATING TEMPERATURE	-20 °C to 85 °C (-23 °F to 185 °F), non-condensing	
<b>MECHANICAL</b>		
VENT	Integrated Gore® Vent to effectively control condensation, maintain internal environmental stability and protect sensitive components	
EXTERNAL SIM CARD ACCESS	Secured with an IP67-rated screw-on cap to provide convenient external access to the SIM card slot, and ensure protection against moisture and dust ingress in outdoor environments, ideal for quick SIM card swaps without compromising enclosure integrity.	
GROUNDING	Equipped with a brass grounding lug to provide a reliable grounding point for static discharge protection, and prevent electrostatic build-up, especially in outdoor installations exposed to varying weather conditions.	
DIMENSIONS (L X W X H)	180 mm x 130 mm x 45 mm (7.09 in x 5.12 in x 1.77 in)	
WEIGHT	550 g (1.21 lb), including antenna and pole mount	

## DIGI HX20 GATEWAY FOR LORAWAN

# Specifications and Part Numbers



Manage this device with  
Digi X-ON IoT platform

Specifications	Digi HX20 Gateway (US915)	Digi HX20 Gateway (EU868)
<b>ACCESSORIES</b>		
<b>INCLUDED ACCESSORIES</b>	IP67 enclosure, 48 VDC PoE Injector with power cable, 6 ft Ethernet patch cable for testing, and screw-on Ethernet cable gland Stainless steel hose clamps for pole mounting (up to 4" diameter), nuts and washers for attaching ring terminal to ground lug LoRa antenna for ISM 868 MHz, cellular antenna and pre-activated SIM card included with select models (see Part Numbers for details)	
<b>APPROVALS*</b>		
<b>EMISSIONS / IMMUNITY</b>	CE (RED), UKCA; FCC Part 15 Subpart B; CAN ICES-003	
<b>SAFETY</b>	IEC 62368-1, EN 62311	
<b>WARRANTY</b>		
<b>PRODUCT WARRANTY</b>	3-year	

Part Numbers	Digi HX20 Gateway for LoRaWAN	
<b>DIGI HX20 GATEWAY MODELS</b>		
<b>HX20-8-LR-GOE-002</b>	Digi HX20 Gateway, outdoor, Ethernet, LoRaWAN, 868 MHz (EU), LoRaWAN antenna	
<b>HX20-8-LR-GOL-102</b>	Digi HX20 Gateway, outdoor, LTE, LoRaWAN, 868 MHz (EU), LoRaWAN and cellular antennas, and pre-activated SIM card	
<b>HX20-9-LR-GOE-002</b>	Digi HX20 Gateway, outdoor, Ethernet, LoRaWAN, 900 MHz (US), LoRaWAN antenna	
<b>HX20-9-LR-GOL-102</b>	Digi HX20 Gateway, outdoor, LTE, LoRaWAN, 900 MHz (US), LoRaWAN and cellular antennas, and pre-activated SIM card	

Part Numbers	Available Subscriptions and Accessories*
<b>XON-DEV-1MTH</b>	Digi X-ON IoT Platform Developer Edition Subscription
<b>XON-STD-1MTH</b>	Digi X-ON IoT Platform Standard Edition Subscription
<b>XON-PRE-1MTH</b>	Digi X-ON IoT Platform Premium Edition Subscription
<b>XON-PLT-1MTH</b>	Digi X-ON IoT Platform Platinum Edition Subscription
<b>XON-SUP-MTH</b>	Digi X-ON IoT Platform Advanced Technical Support
<b>XON-CELL-2GB</b>	Digi X-ON Cellular Connectivity 2 GB AT&T SIM card (North America)
<b>XON-CELL-EU-2GB</b>	Digi X-ON Cellular Connectivity 2 GB AT&T SIM card (Europe)
<b>XON-CLOUD-TEST-1MTH</b>	Digi X-ON IoT Platform Dedicated Development Server Subscription

\*Digi X-ON 30-day trial subscription included with Digi HX20 Gateway. Additional subscriptions and accessories not included with Digi XBee HX20 Gateway unless otherwise noted.



For more information, please visit [digi.com](https://digi.com).



For more information about Digi HX20 Gateway,  
visit [digi.com/hx20](https://digi.com/hx20).

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