

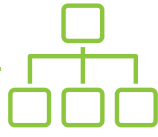


# Industrial IoT Gateway

## DigiRail IoT



**INDUSTRIAL DATA FOR IOT PLATFORMS**



**INTEGRATION WITH LEGACY MODBUS NETWORKS**



**GUARANTEED DATA DELIVERY**



**EASY SETUP**

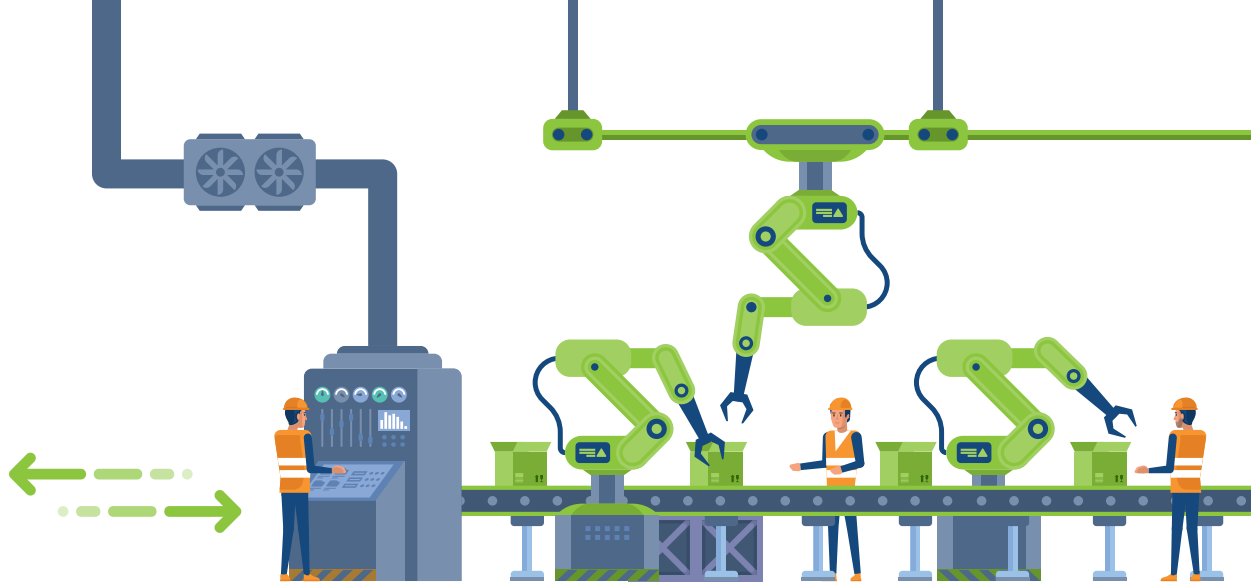


**COMPATIBLE WITH FDA CFR 21 AND GMP**

**DigiRail IoT** is a **gateway with inputs and outputs** that meets the demands of companies seeking to connect their sensors and actuators to the Internet of Things. **DigiRail IoT** is available in two versions: **Wi-Fi** and **Ethernet**. The Wi-Fi version has a range of up to 100 meters, while the Ethernet version offers transmission speeds of up to 100 Mbps.

**DigiRail IoT** provides an **RS485** connection for operation as a gateway, modbus master or slave, with the ability to monitor and publish up to 8 variables from other devices, via the **MQTT** protocol or **Modbus TCP/IP**. Its **message management system** also guarantees security in data traffic. It is configured using **NXperience** software and is connected to the main market clouds, such as Google Cloud, Microsoft Azure, Amazon AWS, **NOVUS Cloud** or any other compatible IoT cloud platform. It also offers support, via **NXperience Trust** software, for validatable systems according to **FDA 21 CFR part 11 and GMP** (Good Manufacturing Practice).

## Topology



## Technical Specifications

<b>Input Channels</b>	6 digital inputs and 2 analog inputs	
<b>Remote Channels</b>	8 configurable channels of up to 64-bits.	
<b>Compatible Analog Signals</b>	0-5 V, 0-10 V, 0-20 mA, 4-20 mA	
<b>Analog Input Resolution</b>	15 bits	
<b>Analog Channels Input Impedance</b>	mA: 15 Ω + 1,5 V V: 1 MΩ	
<b>Accuracy</b>	0.15 % (F.S.)	
<b>Digital Input</b>	<b>Logical Level</b>	Logical level "0": < 0.5 V Logical level "1": > 3 V
	<b>Maximum Voltage</b>	30 V
	<b>Input Impedance</b>	5 kΩ
	<b>Input Current @ 30 Vdc (Typical)</b>	7 mA
	<b>Maximum Frequency (Square wave)</b>	Dry Contact: < 10 Hz PNP: 3 kHz NPN: 3 kHz
<b>Digital Output</b>	<b>Minimum Pulse Length</b>	Dry Contact: 50 ms PNP: 150 us NPN: 150 us
	2 digital NPN outputs Maximum current that can be switched at the output: 700 mA	
<b>Buffer Capacity</b>	<ul style="list-style-type: none"> <li>• 7000 logs with 1 analog input enabled*</li> <li>• 1800 logs with 2 analog inputs enabled and the 6 digital inputs in Count mode*</li> </ul>	
<b>Communication Interfaces</b>	<b>DigiRail IoT – ETH</b>	<ul style="list-style-type: none"> <li>• USB 2.0 Interface</li> <li>• Ethernet Interface (10/100 Mbps) with RJ45 connector</li> <li>• RS485 communication interface with Modbus RTU protocol in Gateway mode</li> </ul>
	<b>DigiRail IoT – WRL</b>	<ul style="list-style-type: none"> <li>• USB 2.0 Interface</li> <li>• Wi-Fi Interface (802.11 b/g/n 2.4 GHz), supporting WPA-Personal (PSK) WPA/WPA2 TKIP/AES/TKIP and AES encryption</li> <li>• RS485 communication interface with Modbus RTU protocol in Gateway mode</li> </ul>

<b>LEDs</b>	<ul style="list-style-type: none"> <li>• 1 x Status LED</li> <li>• 1 x Local Network Connection LED</li> <li>• 1 x Broker MQTT Connection LED</li> </ul>	
<b>Software</b>	NXperience (via USB or TCP/IP network for desktops and notebooks).	
<b>Power Supply</b>	<b>Power Supply</b>	<b>Wi-Fi Model:</b> Consumption: 70 mA @24V Consumption: 160 mA @12V  <b>Ethernet Model:</b> Consumption: 50 mA @24V Consumption: 120 mA @12V
	<b>Batteries</b>	CR2032 battery for internal clock retention
<b>Dimension</b>	129 mm x 142 mm x 38 mm	
<b>Mounting</b>	DIN rail or screw mounting.	
<b>Environment</b>	Operating Temperature: -20 to 60 °C (-4 to 140 °F) Storage Temperature: -20 to 60 °C (-4 to 140 °F) Humidity: 5 to 95 % RH (without condensation)	
<b>Housing</b>	ABS+PC	
<b>Protection Index</b>	IP20	
<b>Certification</b>	ANATEL (09260-20-07089), CE, UKCA, FCC, Compatible with IEC 60068-2-6 (2007), Contains FCC ID: 2ADHKATWINC1500, Contains IC: 20266-WINC1500PB.	

\* None of the cases consider event log.