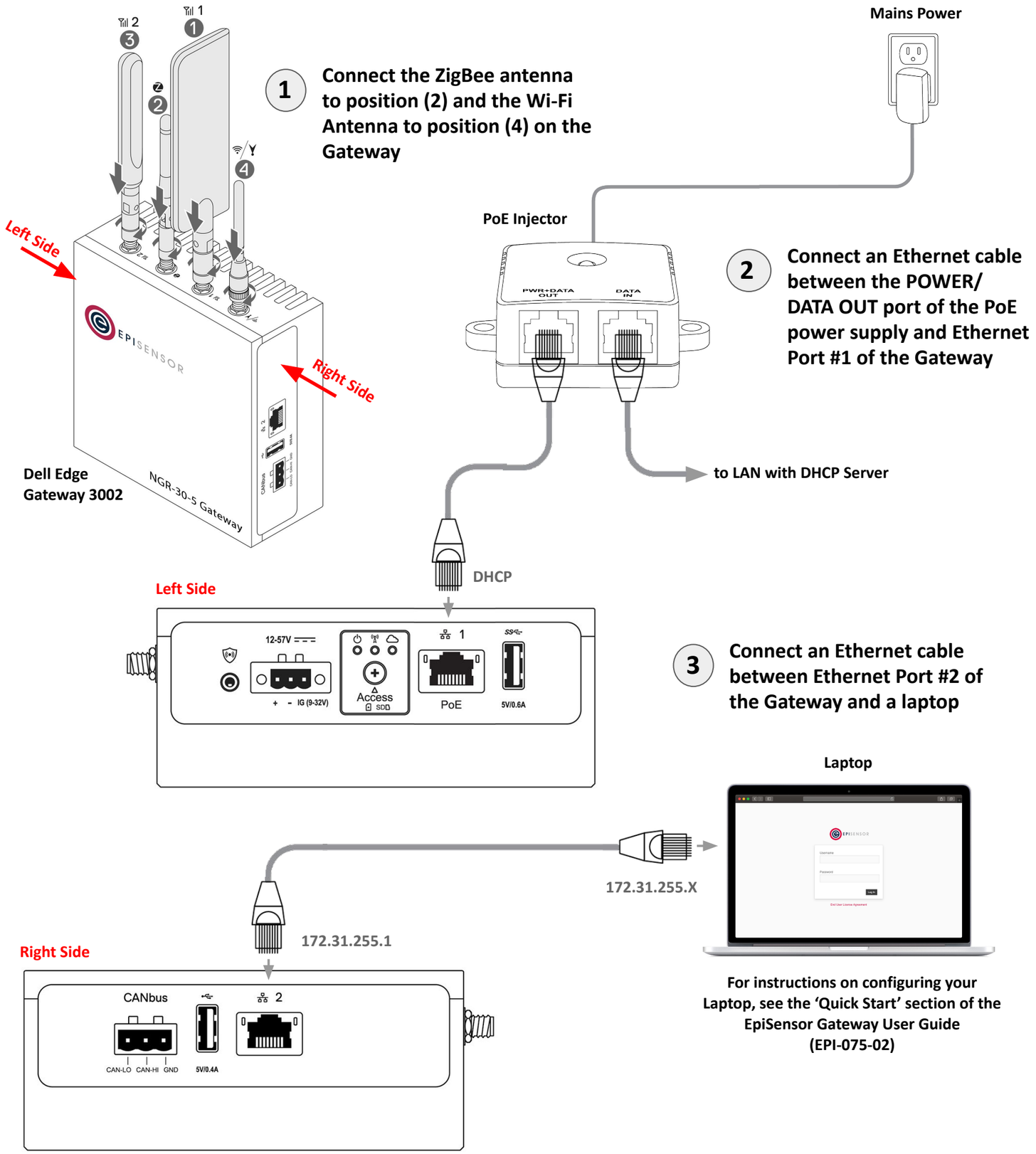
Ethernet Connection Diagram for NGR-30-5 (with optional PoE Power Supply)



Install Sheet

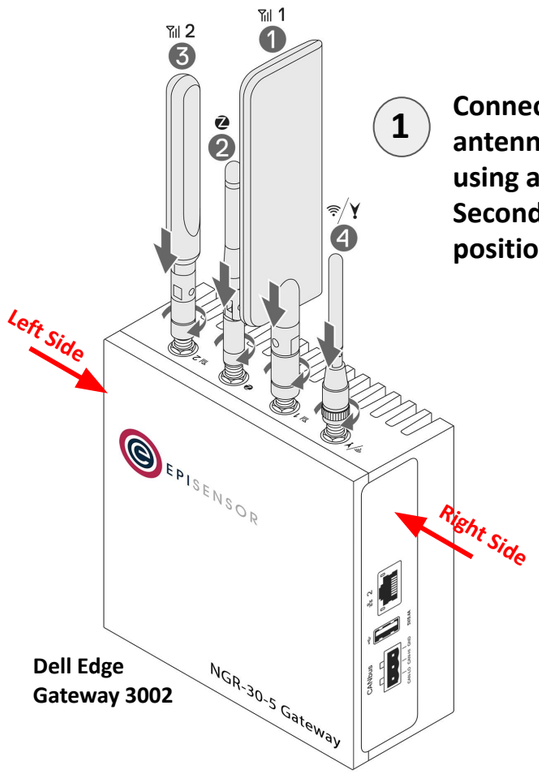
NGR-30-5 // Industrial IoT Gateway

Document Ref. EPI-148-01

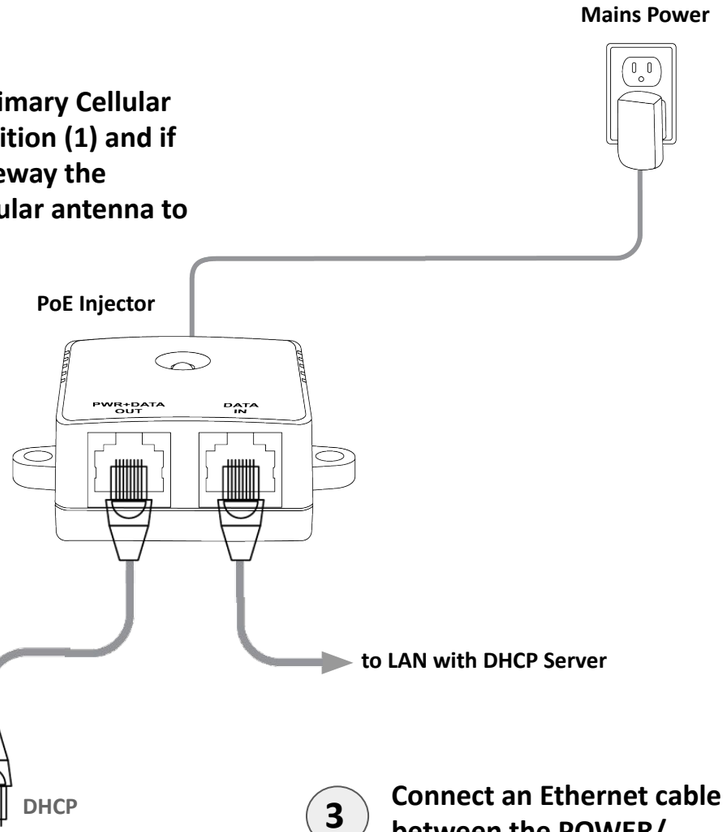
Installation & Safety Notes

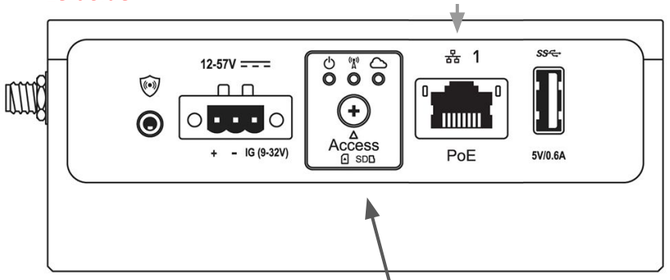
- ➔ EpiSensor equipment should be installed, operated, serviced and maintained only by qualified personnel. EpiSensor does not assume any responsibility for any consequences arising out of the use of this equipment.
- ➔ The NGR-30-5 Gateway is not designed for use in wet environments. If it is to be installed in a wet environment, depending on the location and environment, it must be installed in a panel box or enclosure with an Ingress Protection (IP) rating of IP54, IP65, or higher.
- ➔ To reduce the risk of electric shock, power to the DC+ and DC- terminals must be provided by a power supply or transformer/rectifier circuit that is designed with double-insulation. The power supply or power circuit source must comply with local codes and regulations; for example, in the USA, NEC Class 2 (SELV/limited energy circuit, or LPS circuitry). If powered by a battery, double-insulation is not required.
- ➔ When installing the Gateway, the responsible party or integrator shall use the 12-57 VDC or Power over Ethernet (PoE) power source 37-57 VDC, with a minimum of 13 W power already present as part of the client's installation.
- ➔ Ensure that the power source providing power to the Gateway is reliably grounded and filtered such that the peak-to-peak ripple component is less than 10 percent of the input DC voltage.
- ➔ When installing the Gateway, use a cable appropriate for the load currents: 3-core cable rated 5 A at 90°C (194°F) minimum, which conform to either IEC 60227 or IEC 60245. The system accepts cables from 0.8 mm to 2 mm. The maximum operating temperature of the Gateway is 70ºC (158°F). Do not exceed this maximum temperature while operating the Gateway inside an enclosure. Internal heating of the Gateway electronics, other electronics, and the lack of ventilation inside an enclosure can cause the operating temperature of the Gateway to be greater than the outside ambient temperature. Continuous operation of the Gateway at temperatures greater than 70ºC (158°F) may result in an increased failure rate and a reduction of the product life. Ensure that the maximum operating temperature of the Gateway when placed inside an enclosure is 70ºC (158°F) or less.
- ➔ Always ensure that the available power source matches the required input power of the Gateway. Check the input power markings next to power connector(s) before making connections. The 12-57 V DC or the PoE power source must be compliant with local Electrical Codes and Regulations.
- ➔ To ensure the protection provided by the Gateway is not impaired, do not use or install the system in any manner other than what is specified in the install sheet or user guide.
- ➔ If a battery is included as part of the system or network, the battery must be installed within an appropriate enclosure in accordance with local fire and electrical codes and laws.
- ➔ The system is for installation in a suitable industrial enclosure (provides electrical, mechanical, and fire hazard protection).
- ➔ The core module only can be wall-mounted (without the need for an additional enclosure).
- ➔ This product is designed for specific applications and needs to be installed by qualified personnel with RF and regulatory-related knowledge. The general user shall not attempt to install or change the setting.
- ➔ The product shall be installed at a location where the radiating antenna is kept 20 cm from nearby persons in its normal operation condition in order to meet regulatory RF exposure requirements.
- ➔ Use only approved antenna(s). Non-approved antenna(s) may produce spurious or excessive RF transmitting power which may lead to a violation of FCC/IC limits.

Preparing the NGR-30-5 for cellular communications

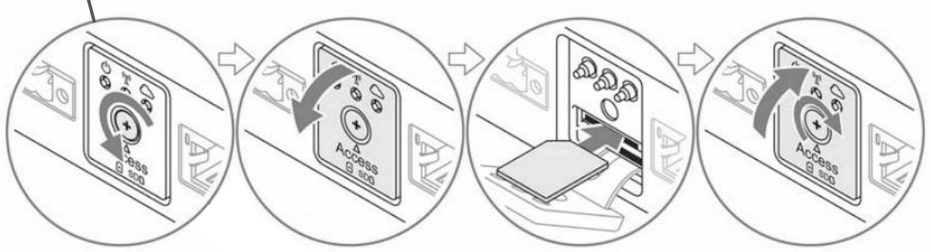


1 **Connect the Primary Cellular antenna to position (1) and if using a 4G Gateway the Secondary Cellular antenna to position (3)**





3 **Connect an Ethernet cable between the POWER/ DATA OUT port of the PoE power supply and Ethernet Port #1 of the Gateway**



2 **With the Gateway powered down, remove the screw from the access door and insert a micro-SIM as shown, then close the screw firmly.**

Install Sheet

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EPISENSOR

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