

NS002

Quick Installation Guide

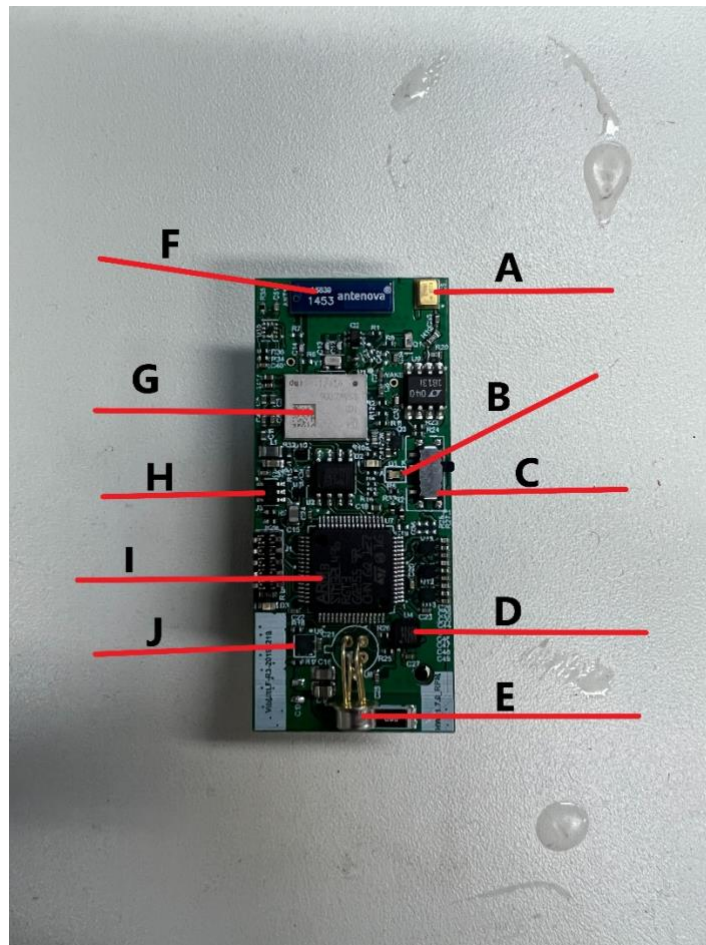
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1. Sensor Introduction

The image below details the various parts of the NS002 sensor board.

- a) Acoustic emission sensor.
- b) Main board LED (Red, Amber, Green).
- c) Power On – Off switch.
- d) Analogue Accelerometer (F-max at 8kHz (X,Y) , and 5.1kHz (Z)).
- e) IR Temperature sensor.
- f) WiFi Antenna.
- g) WiFi + Imp003 module allowing for 2.4GHz WiFi connectivity.
- h) Magnetic flux sensor.
- i) STM32 Microprocessor. (Low power microcontroller to achieve high sampling rate).
- j) HTS sensor (Humidity and temperature sensor).





2. Quick installation

- a) Ensure that ESD gloves are worn prior to handling the PCB board
- b) If the presence of static electricity is negatable, ensure that hands are completely dry prior to unscrewing the sensor cap.
- c) Unscrew the cap in an anticlockwise motion.
- d) Ensure that sensor is blinked up to correct Wi-Fi credentials (see DIY app manual blink-up), and that the Wi-Fi is operational and at an acceptable range for the sensor to receive the Wi-Fi signal (refer to “IoT Network Strength Check NS002 with Customer Wi-Fi” for requirements and instructions)
- e) Switch the sensor on, by turning the power switch upwards.
- f) Note the various blinking patterns that the main board LED will display. The various patterns are:
 - 1) Sensor will blink red for a couple of seconds as soon as it is switched on.
 - 2) Sensor will start blinking red for a short period of time (250ms) then amber for a short period of time (250ms), indicating it has found the network and is gathering IP address information.
 - 3) Sensor will blink green, indicating a successful Wi-Fi connection.

Please review the image below for sensor light patterns and what they mean.

WiFi and Ethernet Connection Patterns						
Getting IP address	500ms	250ms	250ms	Repeat		
Resolving server name	500ms	250ms	250ms	Repeat		
Connecting to server	500ms	500ms	500ms	250ms	Repeat	
Connected to server	500ms	500ms	Repeat			
Proxy address or port incorrect	500ms	500ms	250ms	250ms	250ms	Repeat
Proxy credentials rejected	500ms	500ms	250ms	250ms	250ms	Repeat