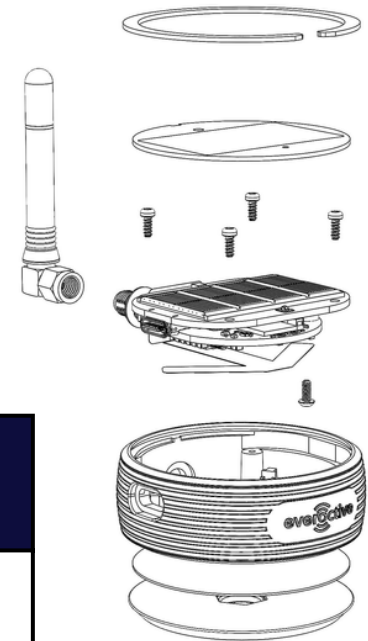


ENV+ Evaluation Kit Product Specifications



Intended Use

- Evaluation of Everactive's patented batteryless technology, which includes custom circuits for energy harvesting & power management and wireless networking.



Product Description

Main Features	
Solution	<ul style="list-style-type: none"> • 2 Environmental+ (ENV+) Eversensors with antenna • 1 Evergateway dongle with antenna • 1 USB cable <ul style="list-style-type: none"> ◦ For optimal Evergateway dongle placement while in use • 1 Programming board <ul style="list-style-type: none"> ◦ For resetting sensors ◦ Future capability: Over the wire configuration/updating sensor firmware
System Requirements	<ul style="list-style-type: none"> • Computer with Intel processor & Internet connectivity <ul style="list-style-type: none"> ◦ Windows operating system • Open USB port (Evergateway dongle) >1 Amp • USB Hub required if <ul style="list-style-type: none"> ◦ USB port does not supply >1 Amp, AND ◦ Desire maximum Evernet range
Evernet Communication Protocol	<ul style="list-style-type: none"> • Evernet 2 modem in 915MHz ISM band with external antenna for Eversensor connectivity





Evaluation Kit Features

Operating Temperature	<ul style="list-style-type: none">• Sensor: -10°C to 60°C (14°F - 140°F)• Evergateway dongle: 10°C to 35°C (50°F to 95°F)
Operating Humidity	<ul style="list-style-type: none">• 20% to 80% RH, non-condensing
Operating Behavior	<p>Approximate sensor boot time:</p> <ul style="list-style-type: none">• 400 lux harvesting source: 1 minute boot• 200 lux harvesting source: 2 minute boot• 100 lux harvesting source: 5 minute boot <p>Full capacitor charge under consistent harvesting:</p> <ul style="list-style-type: none">• 200 lux harvesting source: 3 days <p>Reporting frequency:</p> <ul style="list-style-type: none">• 150 lux harvesting source: 1 minute frequency reporting• 100 lux harvesting source: 5 minute frequency reporting <p>Full capacitor discharge time assuming harvesting removal:</p> <ul style="list-style-type: none">• 16 hours
Sensor Modalities and Parameters	<p>Primary sensor package: BME280</p> <ul style="list-style-type: none">• Temperature: -10°C to 60°C; +/- 2°C• Humidity: 20% to 80% RH; +/- 5%• Pressure: 300 to 1100 hPa <p>Secondary acceleration sensor package ADXL362 (PDF)</p> <ul style="list-style-type: none">• Ultra low power triaxial accelerometer that sends "Move + Shake" sensor notifications in milli-g in the X,Y, & Z axis
Support and Other Features	<ul style="list-style-type: none">• Dev Console (Cloud) capabilities<ul style="list-style-type: none">◦ Integration modalities:<ul style="list-style-type: none">▪ API▪ Webhooks▪ MQTT subscription service◦ Time series charts of sensing modalities<ul style="list-style-type: none">▪ Data Export into CSV◦ Sensor / Gateway Status◦ Ongoing cloud SW platform updates• Over-the-air Evergateway dongle and ENV+ Eversensor updates• Programming board to reset sensors



Evaluation Kit Features

Storage Temperature	<ul style="list-style-type: none">-20°C to 70°C (-4°F to 158°F)
Storage Humidity	<ul style="list-style-type: none">5% to 95% RH, non-condensing
Power	Evergateway dongle: <ul style="list-style-type: none">USB 2.0 (5VDC, 1A) for max rangeUSB hub
Wireless Protocol	Evernet 2 (proprietary) 915MHz <ul style="list-style-type: none">FCC ID: 2AO7C-83000023 for the wireless module internal to the Evergateway dongleThis IoT solution is not certified Intended use: prototyping and experimentation only.
Mounting	Sensor can be mounted with two primary ways: <ul style="list-style-type: none">Two-side adhesive strips1/4-20 thread for mounting with accessory plate For optimal harvesting, orient solar (photovoltaic - PV cells) with flat directly with light source.
Unit Weight	<ul style="list-style-type: none">Evergateway dongle: 0.1kg (3.5oz)
Unit Size without Antennas	<ul style="list-style-type: none">Sensor:<ul style="list-style-type: none">5.00 cm diameter, 2.00 cm heightEvergateway dongle:<ul style="list-style-type: none">129mm x 45.4mm x 31.2mm (5.1in x 1.8in x 1.2in)
Antennas size	<ul style="list-style-type: none">Sensor: 5 cmEvergateway dongle antenna: 13mm dia x 204mm (0.51in x 8.0in)
Shipping Weight	<ul style="list-style-type: none">1kg (2.2lbs)
Shipping Size	<ul style="list-style-type: none">178mm x 178mm x 83mm (7in x 7in x 3.25in)
Status light indicators	Evergateway dongle status LED ENV+ Eversensor status LED
Not rated for	Ingress Protection, Vibration, Shock, Safety, Salt & Fog, Package Drop, EM