anyw<mark>Air</mark>iO

The Droplet is anywAiR iO's multi-purpose wireless (LoRa) IoT environmental sensor. Designed to capture the most useful sensor data, in a small package, with minimum install time.

Measuring Temperature, Humidity, Light (Lux), and Motion , the Droplet sensors collect the most useful environmental data that can be used to monitor, control, and utilize spaces better.

The Droplet is a surface mount sensor, making installation time trivial by eliminating sensor wiring. This greatly reduces cost, and interruption to the building occupants.

LoRa wireless IoT technology provides a very long transmission range that is energy efficient and less susceptible to object interference than other wireless technologies.

Powered by 3 x AA batteries, Droplet sensors have a runtime of 3-5 years depending on the configured push rate.



Technical Data

| General | | | | | | |
|--------------------------------|--|--|--|--|--|--|
| Dimensions | 86mm x 86mm x 25.5mm or 3.39in x 3.39in x 1.0in | | | | | |
| Power Supply | 3 x AA Batteries (3-5 years runtime depending on configured push rate) | | | | | |
| Push Rate | Adjustable: 30sec, 1min, 3min, 5min, 10min, 15min, 30min, 1hour | | | | | |
| IP Rating | IP40 | | | | | |
| Sensor Specifications | | | | | | |
| Temperature Sensor | Operating Range : -10°C -> 80°C, Accuracy : ± 0.25°C | | | | | |
| Humidity | Operating Range : -10°C -> 80°C, Accuracy : ± 0.1 %RH | | | | | |
| LUX Sensor | Detection Range: 1-65535 lx | | | | | |
| PIR Sensor | Detection Range: 5 meters Field of View: 120deg cone | | | | | |
| Wireless Communications (LoRa) | • | | | | | |
| Transmit Frequency | 915 MHz | | | | | |
| Spreading Factor | 7 | | | | | |
| Bandwidth | 250 kHz | | | | | |

Ordering Information

| Device Models | | | | | | | |
|---|---|--|--|--|--|--|--|
| D - LR Product Family Sensors (add all required) D - Droplet TH - Temperature and Humidity Communication L - Light / Lux LR - LoRa Raw M - Motion / PIR | | | | | | | |
| D-LR-TH | LoRa RAW wall mount sensor. Temperature, Humidity. | | | | | | |
| D-LR-THL | LoRa RAW wall mount sensor. Temperature, Humidity, Light/Lux. | | | | | | |
| D-LR-THLM | LoRa RAW wall mount sensor. Temperature, Humidity, Light/Lux. Motion (PIR). | | | | | | |

Configuration

| DIP Switch Settings | | | | | | | | | | | |
|--|---|---|--|---|--|---|--|---|---|--|--|
| Interval | 30 sec | 1 min | 3 min | 5 min | 10 min | 15 min | 30 min | 1 hour | | | |
| Switches 1,2,3 | 100 | 010 | 110 | 001 | 101 | 000 | 011 | 111 | | | |
| Set switch to ON/1 to enable data push on Motion (PIR) detection. | | | | | | | | | | | |
| Set switch to ON/1 to enable debug messages over serial. | | | | | | | | | | | |
| Hard reset. When the switch is set to ON/1 a new Sensor ID will be assigned everytime the device is powered up. | | | | | | | | | | | |
| If switches 7 or 8 are set to 1 (Testing Mode), this will override other Push Rate settings and assign a fixed Sensor ID and send data at a 6 second Push Rate. When both switches are set to 0, the device will use its configured push rate, and self assigned Sensor ID. | | | | | | | | | | | |
| Switch Positio | n Sei | nsor ID A | ssignment | | | | | | | | |
| 00 | Sel | f Assign | ed ID | | | | | | | | |
| 10 | AA | B2AAAA | - 6 Sec | Interval | S | | | | | | |
| 01 | BB | B2BBBB | - 6 Sec | Intervals | ; | | | | | | |
| 11 | CC | B2CCCC | - 6 Sec | Interval | S | | | | | | |
| | Switches 1,2,3 Set switch to Set switch to Hard reset. W everytime the If switches 7 Rate settings Rate. When b push rate, and Switch Position 00 10 01 | Switches 1,2,3 100 Set switch to ON/1 to Set switch to ON/1 to Hard reset. When the everytime the device If switches 7 or 8 are Rate settings and as Rate. When both sw push rate, and self as Switch Position Set 10 AA 01 | Switches 1,2,3 100 010 Set switch to ON/1 to enable Set switch to ON/1 to enable Hard reset. When the switch everytime the device is power If switches 7 or 8 are set to 7 Rate settings and assign a fin Rate. When both switches a push rate, and self assigned Switch Position Sensor ID A 00 Self Assign 10 AAB2AAAA 01 BBB2BBBB | Switches 1,2,3 100 010 110 Set switch to ON/1 to enable data p Set switch to ON/1 to enable debug Hard reset. When the switch is set everytime the device is powered up If switches 7 or 8 are set to 1 (Testi Rate settings and assign a fixed Se Rate. When both switches are set to push rate, and self assigned Senso Switch Position Sensor ID Assignm 00 Self Assigned ID 10 AAB2AAAA - 6 Sec 01 BBB2BBBB - 6 Sec | Switches 1,2,3 100 010 110 001 Set switch to ON/1 to enable data push on Set switch to ON/1 to enable debug messa Hard reset. When the switch is set to ON/1 everytime the device is powered up. If switches 7 or 8 are set to 1 (Testing Moore Rate settings and assign a fixed Sensor ID Rate. When both switches are set to 0, the push rate, and self assigned Sensor ID. Switch Position Sensor ID Assignment 00 Self Assigned ID 10 AAB2AAAA - 6 Sec Intervals 01 BBB2BBBB - 6 Sec Intervals | Switches 1,2,3 100 010 110 001 101 Set switch to ON/1 to enable data push on Motior Set switch to ON/1 to enable debug messages ov Hard reset. When the switch is set to ON/1 a new everytime the device is powered up. If switches 7 or 8 are set to 1 (Testing Mode), this Rate settings and assign a fixed Sensor ID and se Rate. When both switches are set to 0, the device push rate, and self assigned Sensor ID. Switch Position Sensor ID Assignment 00 Self Assigned ID 10 AAB2AAAA - 6 Sec Intervals 01 BBB2BBBB - 6 Sec Intervals | Switches 1,2,3 100 010 110 001 101 000 Set switch to ON/1 to enable data push on Motion (PIR) of the switch is set switch to ON/1 to enable debug messages over serial Hard reset. When the switch is set to ON/1 a new Sensor everytime the device is powered up. If switches 7 or 8 are set to 1 (Testing Mode), this will ov. Rate settings and assign a fixed Sensor ID and send data Rate. When both switches are set to 0, the device will us push rate, and self assigned Sensor ID. Switch Position Sensor ID Assignment 00 Self Assigned ID 10 AAB2AAAA - 6 Sec Intervals | Switches 1,2,3 100 010 110 001 101 000 011 Set switch to ON/1 to enable data push on Motion (PIR) detection Set switch to ON/1 to enable debug messages over serial. Hard reset. When the switch is set to ON/1 a new Sensor ID will everytime the device is powered up. If switches 7 or 8 are set to 1 (Testing Mode), this will override of Rate settings and assign a fixed Sensor ID and send data at a 6 Rate. When both switches are set to 0, the device will use its co push rate, and self assigned Sensor ID. Switch Position Sensor ID Assignment 00 Self Assigned ID 10 AAB2AAAA - 6 Sec Intervals 01 BBB2BBBB - 6 Sec Intervals | Switches 1,2,3 100 010 110 001 101 000 011 111 Set switch to ON/1 to enable data push on Motion (PIR) detection. Set switch to ON/1 to enable debug messages over serial. Hard reset. When the switch is set to ON/1 a new Sensor ID will be assig everytime the device is powered up. If switches 7 or 8 are set to 1 (Testing Mode), this will override other Pus Rate settings and assign a fixed Sensor ID and send data at a 6 second F Rate. When both switches are set to 0, the device will use its configured push rate, and self assigned Sensor ID. Switch Position Sensor ID Assignment 00 Self Assigned ID 10 AAB2AAAA - 6 Sec Intervals | | |

*Only on D-LR-THLM

