The Droplet by Nube iO is a cutting-edge wireless (LoRa®) IoT sensor that excels in capturing essential environmental data, including Temperature, Humidity, Light (Lux), and Motion. Its surface mount design streamlines installation by eliminating the need for sensor wiring, reducing costs and disruptions for building occupants.

Leveraging LoRa® technology, the Droplet ensures a robust transmission range, energy efficiency, and minimal susceptibility to object interference compared to other wireless technologies. This makes it an ideal choice for monitoring, controlling, and optimising various spaces.

Powered by 3 x AA batteries, Droplet sensors offer a reliable 3-5 year runtime, depending on the configured push rate. This long-lasting performance ensures consistent data collection and monitoring for extended periods.

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**: 120 deg cone
Wireless Communications	
LoRa®	**Supported Frequencies:** AU915, US915, AS232, EU863 **Spreading Factor:** 7 **Bandwidth:** 250 kHz

Configuration

<table>
<tr><th colspan="2">DIP Switch Settings</th></tr>
<tr><td>DIP Switches 1-3
Data Interval/Push Rate</td><td>
<table>
<tr><th>Interval</th><td>30 sec</td><td>1 min</td><td>3 min</td><td>5 min</td><td>10 min</td><td>15 min</td><td>30 min</td><td>1 hour</td></tr>
<tr><th>Switches 1,2,3</th><td>100</td><td>010</td><td>110</td><td>001</td><td>101</td><td>000</td><td>011</td><td>111</td></tr>
</table>
</td></tr>
<tr><td>DIP Switch 4*
PIR Interrupt Enable</td><td>Set switch to ON/1 to enable data push on Motion (PIR) detection. *Only on D-LR-THLM</td></tr>
<tr><td>DIP Switch 5
Serial Debug Enable</td><td>Set switch to ON/1 to enable debug messages over serial.</td></tr>
<tr><td>DIP Switch 6
Hard Reset</td><td>Hard reset. When the switch is set to ON/1 a new Sensor ID will be assigned everytime the device is powered up.</td></tr>
<tr><td>DIP Switches 7-8
Testing Mode - Sensor ID Assignment</td><td>If switches 7 or 8 are set to 1 (Testing Mode), the device will override any other Push Rate settings and automatically assign a fixed Sensor ID. Data will be sent at a 6-second Push Rate. When both switches are set to 0, the device will revert to its default push rate and use its self-assigned Sensor ID.
<table>
<tr><th>Switch Position</th><th>Sensor ID Assignment</th></tr>
<tr><td>00</td><td>Self Assigned ID</td></tr>
<tr><td>10</td><td>AAB2AAAA - 6 Sec Intervals</td></tr>
<tr><td>01</td><td>BBB2BBBB - 6 Sec Intervals</td></tr>
<tr><td>11</td><td>CCB2CCCC - 6 Sec Intervals</td></tr>
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About Nube iO

Nube iO stands at the forefront of building technology, providing innovative software and hardware solutions. We're dedicated to enhancing building operations, sustainability and compliance by providing secure connectivity, seamless system operability, and delivering all-encompassing monitoring, analysis, and control. Our team leads innovation in the building industry.

We tackle the integration of diverse systems and modernise legacy technologies to streamline operations and improve functionality. Our innovative approach ensures seamless connectivity across devices and protocols, making Nube iO a go-to for end-to-end building automation, sustainability and asset management solutions.

To learn more about our products and solutions, visit: nube-io.com

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