

# Ambient Light Sensor

DOC ver.: BQW\_03\_0017.003



## Features

- EU, US frequency support
- LoRaWAN 1.0.3
- Optical sensor LTR-F216A
- 16 to 20 bits measurement resolution
- Wide dynamic range (0.01 to 39K lux) with linear response
- 0 to 50°C operation temperature range

The Ambient Light Sensor utilizes LoRaWAN connectivity to provide measurements of ambient light intensity which matches the human eye's response to light under a variety of lighting conditions.

## Specification

|                              |   |
|------------------------------|---|
| <b>Frequency</b>             | 868MHz & 915MHz                         |
| <b>RF TX power</b>           | US: +19dBm<br>EU: +17dBm                |
| <b>Antenna Gain</b>          | -2dBi Peak, -5dBi Avg                   |
| <b>RF Sensitivity</b>        | -135dBm                                 |
| <b>Battery Type</b>          | 3.6V ½ AA Li-SOCI2, 1200mAh             |
| <b>Battery Lifetime*</b>     | Up to 16 months                         |
| <b>Average Current</b>       | 135mA maximum / 100uA minimum           |
| <b>Protocol</b>              | LoRaWAN 1.0.3                           |
| <b>Operation Temperature</b> | 0 to 50°C                               |
| <b>Environmental Rating</b>  | IP40 equivalent                         |
| <b>Dimensions</b>            | 50mm x 20mm x 50mm                      |
| <b>Weight</b>                | 30g without battery<br>40g with battery |
| <b>Sensor</b>                | Wide dynamic range (0.01 to 39K lux)    |

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## SKU Detail

| SKU         | Country | Channels | Frequency Band (MHz) |
|-------------|---------|----------|----------------------|
| TBAM100-868 | Europe  | 8        | EU868 (862~870)      |
| TBAM100-915 | USA     | 16       | US915 (902~928)      |

\* Samples are also available for IN865, AS923, AU915, KR920.