Payload structure

For IMBUILDINGS (NB-)IoT/LoRaWAN Products

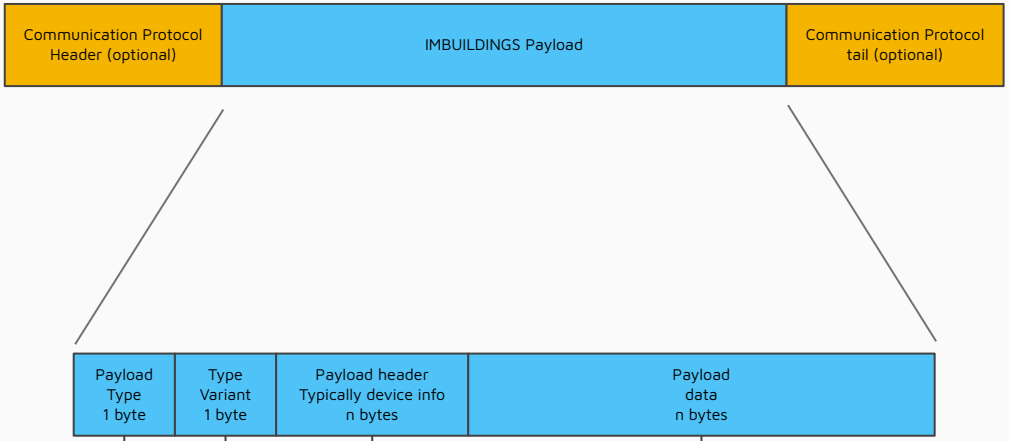
Introduction

To maximize the performance of IMBUILDINGS NB-IoT, IoT and LoRaWAN products, a lean data payload structure is used.

This document describes the structure and the available payload setups of different products.

Note since v1.6 of this document the keyword Type Version is changed to Type Variant.
This is only a naming convention, there are no changes in structures or values.

Payload Structure



In most cases the payload is packed within a Communication Protocol.
In case of IMBUILDINGS NB-IoT Products this protocol is by default MQTT-SN.

This means that the message content published to the broker is in the format of the payload structure.

People Counter

Type: 2, Variant 6 - LoRaWAN People Counter

Section	Size in bytes	[Index] Structure / values
Payload Type	1	[0] 0x02
Type Variant	1	[1] 0x06
Payload Header	11	[2] Device ID : 8 bytes [10] Device Status : 1 byte (unsigned) [11] Battery Voltage : 2 bytes (int16 unsigned)
Payload	10	[13] Counter A : 2 bytes unsigned int16 (relative count value) [15] Counter B : 2 bytes unsigned int16 (relative count value) [17] Sensor Status : 1 byte bitwise [18] Total Counter A : 2 bytes unsigned int16 [20] Total Counter B : 2 bytes unsigned int16 [22] Payload Counter : 1 byte (unsigned)

Example payload parser