

Prelude data format

Prelude is the given name of this format that we have used and extended over time.

The measurements are JSON, regardless of their source. The type of every value is "json number". Some whole numbers, some floating point.

DevEUI

DevEUI is a 64-bit MAC-address like (EUI-64) value formatted like 'a8-17-58-ff-fe-03-0f-53'.

	Property
DevEUI	deveui

Timestamps

	Property	Unit	
Timestamp	timestamp_parser	epoch seconds	Timestamp of parser
Timestamp	timestamp_node	epoch seconds	Timestamp of LoRaWAN GW
Timestamp	time	see influx docs	Provided by InfluxDB (not present over MQTT)

Optionals

Any implementation might want to consider any one of these properties optional, as their presence depends on sensor model and configuration.

	Property	Unit	Only in
Air temperature	temperature	[°C]	
Relative humidity	humidity	[% RH]	
Light	light	(linear index)	ERS (all)
Passive infrared	motion	(linear index)	ERS (all)
CO2	co2	[ppm]	ERS CO2
Battery voltage	battery	[V]	
Average SPL	sound_avg	[dB]	ERS Sound
Peak SPL	sound_peak	[dB]	ERS Sound
Soil moisture	moisture	[%]	
Atmospheric pressure	pressure	[bar]	ELT 2 with soil moisture
Acceleration (X)	acceleration_x*	[g]	ELT 2
Acceleration (Y)	acceleration_y*	[g]	ELT 2
Acceleration (Z)	acceleration_z*	[g]	ELT 2
Occupancy	occupancy	(enum)	EMS Desk, ERS Eye
Raw thermophile data	external_ir_temperature	[°C]	EMS Desk
Door pulse count	absolute_pulse_count	(integer)	EMS Desk
Door pulse count	relative_pulse_count	(integer)	EMS Door

	Property	Unit	Only in
Door state	digital	(integer)	EMS Door

* = Influx provides this flat (as documented), from MQTT this is a nested object.

From:

<https://smartcampus oulu.fi/knowledge/> - Smart Campus Oulu Knowledge

Permanent link:

<https://smartcampus oulu.fi/knowledge/doku.php?id=lorawan:prelude&rev=1640114724>

Last update: **2021/12/21 19:25**

