JUNO TH TILT PAYLOAD DESCRIPTION EN

This chapter describes the structure of the telemetry data. The number of bytes in the payload depends on the configuration of the sensor. The structure of the data depends on which sensors are present in your product. In principle, each version has a header. This has information about the version and status of the sensor and also contains a master measured value. This measured value can simply be assumed to be the current measured value. The header is followed by an additional payload part that contains further information, such as special parameters for the measuring principle or settings for position and opening detection. Not every sensor has an additional payload part.

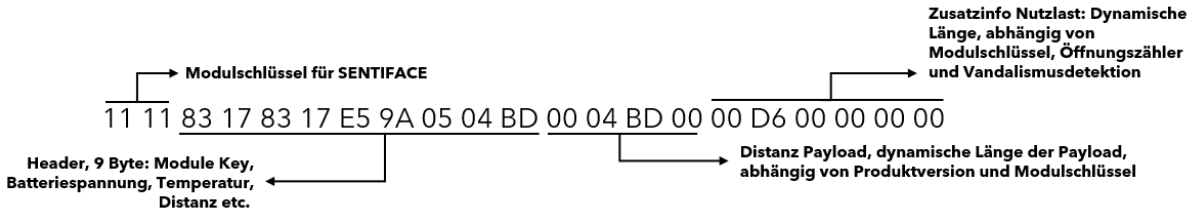
Terms	Description
Byte No.	Byte number starting at 1
Alias	Comprehensible name of the variable
Description	Description of the variables
Designation	Designation in the Dataconverter
Unit	Unit of the variables
Datahub .json key	Key in the .json when using the data hub

STRUCTURE OF THE MODULE KEY

Byte 1		Byte 2	
Bit 7 - 4	Bit 3 - 0	Bit 7 - 4	Bit 3 - 0
Basic ID module e.g. Sentiface, Senticom, Sentivisor	Major version (SW/HW version)	Minor version (SW/HW version)	Product version (sensors, e.g. TH, THL, ACC, ...)

The module key of the SENTIFACE module can be taken from the first 2 bytes of each uplink. The module key is required for the downlink.

UPLINK EXAMPLE (NOT APPLICABLE FOR JUNO)



The following payload example is given for the Helios pressure sensor:

```
11 11 FE 1A D5 95 06 03 00 23 BE
```

Bytes	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**
HEX	11	11	FE	1A	D5	95	06	03	00	23	BE
Description	Module key	Module key	Uplink Counter	Battery Voltage	Battery Voltage	Tempera-ture	Alarm Flag	Alarm Flag	Measurement status	Pressure mbar	Pressure mbar

JUNO PAYLOAD DESCRIPTION

Byte number	Alias name	Description	Unit	Designation in the payload decoder	Module key	Datahub .json key
1 - 2	Module key	Byte 1: • 4-bit MSB: Module code. For Mioty exclusively "Sentiface" telemetry module, i.e. always 0x1. • 4 bit LSB: Major version. FW of the same major version but larger minor version remain compatible with older decoders. However, the number of bytes may change! Byte 2: • 4-bit MSB: Minor version. New SW versions may incrementally add new telemetry to the data packet. • 4 Bit LSB: Sub / Product Version. With Helios, these bits encode the specific configuration of connected sensors.		module_key	XXX1	module_key
3	Uplink counter	Uplink counter: Protocol-independent uplink counter that reaches a maximum of 255. After that, the counter starts again at 0.		uplink_counter	XXX1	uplink_counter
4 - 5	Battery voltage	Current voltage of the battery in millivolts //Voltage in volts battery_voltage: (dataBytes[3] << 8 | dataBytes[4])/1000.0	mV	battery_voltage	XXX1	battery_voltage
6	Internal temperature	Temperature of the sensor: Internal_temperature = | bytes[6] - 128; This value is the temperature value of the controller for this sensor and an inaccurate temperature value +/-2°C	°C	internal_ temperature	XXX1	internal_ temperature
7	Alarms	The alarms are coded as follows. Caution: Several alarms can be active at the same time!		humidity	XXX1	humidity

		DEZ 1, BIN 0000 0001: Temperature High limit value exceeded DEZ 2, BIN 0000 0010: Temperature low below limit value DEZ 4, BIN 0000 0100: Delta alarm temperature DEZ 8, BIN 0000 1000: Relative humidity High limit value exceeded DEZ 16, BIN 0001 0000: Relative humidity Low below limit value DEZ 32, BIN 0010 0000: Delta alarm rel. humidity				
8 - 9	Temperature	Exact temperature of the SHT40, as described in the data sheet. `decoded.temperature = ((bytes[idx++] << 8) | bytes[idx++]) / 10 - 100;`	°C	temperature	XXX1	temperature
10	Relative humidity	Relative humidity of the SHT40, as described in the data sheet.	%RH	humidity	XXX1	humidity
11	Acceleration sensor status	• 0: Acceleration sensor without error • Other: Acceleration sensor error		acc_status	XXX1	acc_status
12	Orientation of the sensor	Displays the orientation of the sensor • 0: Vertical: Lies on its side • 1: Face Up • 2: Face Down • 3: Error		orientation	XXX1	orientation
13	Angle	Returns the angle in °, resolution 1°	°	angle	XXX1	angle
14	Open	Indicates whether the flap is open or closed		is_open	XXX1	is_open
15	Opening counter relative	Indicates how many openings have been performed since the last uplink		open_cnt_rel	XXX1	open_cnt_rel
16	Lifetime opening counter	Indicates how many openings were carried out in the entire company		open_cnt_total	XXX1	open_cnt_total