

AION 4-20 mA Adapter - LPWAN Binary Payload

Payload Overview

Property	Value
Payload type	LPWAN binary telemetry payload
Total size	19 bytes
Byte order	Big-endian for multi-byte values
Compile condition	Encoder is used when CONFIG_SENTOS_HAS_NRF_CLOUD_SERVICE is disabled
Structure	3-byte Sentigram telemetry header followed by Aion telemetry fields

LPWAN Binary Payload - 19 bytes

Byte offset	Size	Field	Type	Encoding / scaling	Description
0	1	variant_msb	uint8	High byte of AION_VARIANT_CODE()	Module base and major version bits
1	1	variant_lsb	uint8	Low byte of AION_VARIANT_CODE()	Minor version and subtype bits
2	1	uplink_counter	uint8	Increments per encoded LPWAN telemetry message	Uplink counter
3	1	id	uint8	Low byte of telemetry id	User-assigned device/config id
4	1	internal_temperature	uint8	Raw value = degC + 128; decoded value = raw - 128	Internal temperature
5	1	alarm	uint8	Raw alarm bitmask	Per-channel alarm state
6	1	status	uint8	Packed status bitmask	Per-channel channel status
7..8	2	current_ch1_mA	int16	Raw current in mA * 100	Channel 1 raw loop current
9..10	2	current_ch2_mA	int16	Raw current in mA * 100	Channel 2 raw loop current
11..12	2	lower_ch1	int16	Engineering value * 100	Channel 1 lower bound, value at 4 mA
13..14	2	lower_ch2	int16	Engineering value * 100	Channel 2 lower bound, value at 4 mA
15..16	2	upper_ch1	int16	Engineering value * 100	Channel 1 upper bound, value at 20 mA
17..18	2	upper_ch2	int16	Engineering value * 100	Channel 2 upper bound, value at 20 mA