

## LoRa Gateway Protocols

Notebook: daveakerman's notebook

Created: 09/03/2021 12:04

Updated: 09/03/2021 17:09

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URL: <https://github.com/PilnTheSky/lora-gateway/blob/master/gateway.c>

### Commands <command> [: <parameter>]

Function	Command	Parameters	Response	Notes
Send To HAB	send	<channel> <text>		channel is 0 or 1 (CE0 or CE1 module) Text may be encrypted before transmission Transmission is according to configured uplink timings
Request Settings	settings		JSON list of settings	
Save Settings	save			Saves settings to gateway.txt

### Set Value

Format is <parameter\_name>=<value>

See gateway readme file for list of parameters.

Function	Parameters	Response	Notes
Send Config Variable	See readme.,txt for list of variables allowed here and in gateway.txt file.	<channel> <text>	channel is 0 or 1 (CE0 or CE1 module) Text may be encrypted before transmission Transmission is according to configured uplink timings
Request Settings	settings		Sends list of settings as JSON
Save Settings	save		Saves settings to gateway.txt

### JSON Messages

Content	Class	When	Values	Notes
Receiver Config	SET	After settings request	Full list of config values	

Telemetry	POSN	After telemetry reception	index: payload index channel: LoRa channel 0 or 1 payload: payload callsign time: tracker UTC lat: tracker latitude lon: tracker longitude alt: Tracker altitude rate: Ascent rate snr: Packet SNR rssi: Packet RSSI ferr: Packet Frequency Error sentence: Full UKHAS sentence from HAB	
Receiver Stats	STATS	Periodic	index: LoRa channel 0 or 1 rssi: Current RSSI for that channel freq: Current AFC- adjusted frequency	