

SPS200 configuration guide

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Revision history

Revision	Date	Author	Description
1.0	30/04/2024	Jasper Mariën	First release



1. Prerequisites

We use the app: "NFC TagWriter" from NXP in this guide, and recommend using the same app.

2. List of commands

We make a distinction between commands you can send without knowing the pin code, and those were you do need a pin code:

- List of commands you can send without needing a PIN code:
 - o "on" : power on the device
 - "reset" : power cycle the device
 - "test": used as a ping to the device.
 You can see the response "testrsp" by reading the NFC tag again afterwards.
 - "status": request the status of the device.
 You can see the response by reading the NFC tag afterwards.
 Possible responses:
 - generic SIM error
 - SIM PIN required
 - no SIM PIN retries left
 - no network found
 - NTP error
 - MQTT error
 - "glreg": get the configured LoRa region. If you read the tag after sending this command, there will now be a line that says "rsp=glregX" where X is:
 - X = 5 → EU868
 - X = 8 → US915
- List of commands for which you need the PIN code:
 - o "off": set the device in inactive state
 - "newpinxxxxxxx": change the pin code to xxxxxxx (Note, it is very important that you do not forget this pin code)
 - "clrpin": resets the pin to the default pin code (12345678)
 - "slregX: set the lora region, where X is:
 - X=5 -> EU868,
 - X=8-> US915

For the commands where you need a PIN, you need to send the command as following:

cmd=pinXXXXXXXX,[cmd]

Ex. to set the LoRa region to EU868 for use in Europe:

Cmd=pin12345678,slreg5

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3. How to read the NFC tag

 When you open the app you will see the	(09:45) .대 중 [2]
following screen:	프 TAGWRITER NP
2. Press to read the status of the NFC tag of the Parking Sensor.	Click above to read the tag Ky Datasets New Format
 Tap the parking sensor with the back of your	09:45 유 93)
device.	프 TAGWRITER NP
Wait for the message "Tag read successfully" to appear. Try re-positioning your phone if nothing happens	Ready to Scan Tap the tag to read NDEF message



4. You will now see the following screen. Press on	13:1	13	
the text field if you want to see the full content of	<	ICODE	0 Bytes
the field.		Text type=SPS200 99 bytes Plain Text type=SPS200 snr=00:0C:E3:00:00: fwv=0.0.10 btv=2.0 hwv=2 state=on rsp=glreg5 cmd=none	54:B0:5A
	Write	N)) 2/Edit this content	N)) Write New

4. How to write the NFC tag

1.	When you open the app you will see the	09:	45		.u † 🗊
	following screen:	=		TAGWRITER	NP
2.	Press "New" on the bottom to read the status of the NFC tag of the Parking Sensor.		Clic	k above to read the	tag
		My [Datasets	N)) New	교 Format
3.	Press "Plain text".	(09) (45	RECORDS	al ? ()
		Q≡	Business	s Card	
		P	Link		
		((0	WiFi		
		*	Bluetootl	h	
		٢	Email		
		S	Telephor	ne Number	
		0	Geo Loca	ation	
		C?	Launch A	Application	
			Plain Tex	t	
		Ę	SMS		
				CC CX Scan QR Code	

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4. You can now type the command you wish to	(09:46) .ul 🗢 91
send in the text field, using the format as	Cancel TEXT
described above.	Plain Text 21 Bytes
	cmd=on
	Language
	en 🗸 🗸
	"on" ons onze
	qwertyuiop
	asdfghjkl
	☆ z x c v b n m ⊗
	123 😄 space done
	[™]
5. Press "Save & Write".	09:46 .ui 🕈 🗐
	< RECORDS
	Text 🗊 📼
	i cmd=on V 19 bytes
	Add Record Save & Write
	Add Record Save & Wille





5. How to configure the device

Bellow you can find a step by step guide on what you should do to configure and turn on the device using the commands from section 2.

1. Check the LoRa region by sending the	13:13		.u ? 60
command "cmd=glreg". After sending this	<	ICODE	0 Bytes
command, you can read the tag and look for the line "rsp=glregX" to see which region is	Text type=SPS: 99 bytes	200	~
currently contigured:	Plain Te type=Sf snr=00: btv=2.0 hwv=2 state=o rsp=glre cmd=nd	ext PS200 OC:E3:00:00:5 0.10 n egg5 one	4:B0:5A ()) Write New
2. If the device is configured for the wrong region,	12:53		11 Ŷ 65
change it by using the slreg command:	Cancel	TEXT	
	Plain Text		53 Bytes
	cmd=pin12345678,	slreg5	
	Language		-
	CII		•

3.	[OPTIONAL BUT RECOMMENDED] Change the pin	14:56 🕫 🖬
	using the newpin command. Make sure that you	< RECORDS
	remember this pin as there is no convenient way	Text 🗐 🛒
	of recovering/resetting this pin.	cmd=pin12345678,newpin11111111 ∨ 67 bytes
		(+) es
		Add Record Save & Write
A	Turn on the device by using the command	09:46
4.	Turn on the device by using the command "cmd=on"	09:46
4.	Turn on the device by using the command "cmd=on"	09:46
4.	Turn on the device by using the command "cmd=on"	O9:46 II < €
4.	Turn on the device by using the command "cmd=on"	09:46 I Cancel TEXT Plain Text 21 Bytes cmd=on
4.	Turn on the device by using the command "cmd=on"	O9:46 III <
4.	Turn on the device by using the command "cmd=on"	O9:46 III < Cancel TEXT Plain Text 21 Bytes cmd=on
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4.	Turn on the device by using the command "cmd=on"	09:46 Cancel TEXT Plain Text 21 Bytes cmd=oni Language
4.	Turn on the device by using the command "cmd=on"	O9:46 III <
4.	Turn on the device by using the command "cmd=on"	09:46 TEXT Cancel TEXT Plain Text 21 Bytes cmd=on
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