

WiFi Settings

Enable Wifi

2: Wifi on (during hardware limitation, bluetooth will be disabled on LORA32_21 devices) ▼

Network

SCAN WIFI

WIFI \$SID

TNCAPBB8489

WIFI Password

*

TXPWR as STA

Max (20dBm, 100mW, suggested) ▼

AUTO AP Password

*

TXPWR as AP

Min (2dBm, 2mW, suggested) ▼

NTP Server

pool.ntp.org

Enable TNC-Server

☐

Enable GPS-Server

☐

SAVE

APRS Settings

Transmission Settings

Main Frequency [MHz]

434,855

Speed

BW 125kHz CR 4:7 SF 9 (Fast Standard, 1200bps) ▼

Enable LoRa transmitter

☒

Enable LoRa receiver

☒

TX power [dBm]

23

Automatic CodeRate adaption on TX

☐

Filter ero-calls or calls in digipath on reception

Add SNR and RSSI to path. "Y": only if heard direct (recommended for many usecases). "~": not recommended; better let user decide with Q-addressing

To APRSIS* and KISS (recommended with aprsdroid for or digis) ▼

More info for SNR/RSSI path encoding see documentation section below

SNR/RSSI-encoding on klses: compatible to APRS-IS? ▼

☒

Station Settings

Callsign and \$SID

SO9ST-2

Relay Path

WIDE1-1

Symbol Table

L

Symbol

#

Altitude ratio [%]

100

Send Course/Speed along with Altitude

☐

Show Comment

☒

Ratelimit adding comment text

☐

Comment

LORA DIGI i-GATE 434,855

Show Battery

☒

Telemetry Settings

Enable Self Telemetry

☐

Self Telemetry Interval [s]

3600

Self Telemetry Sequence

Numeric ▼

Self Telemetry Relay Path

Fixed Beacons Settings

Fixed Beacon

☒

Fixed Beacon Interval [s]

900

Latitude

50-06.6129N

Longitude

018-59.2806E

Smart Beacons Settings

Min Interval [s]

120

Max Interval [s]

1800

Min speed [km/h]

5

Max speed [km/h]

70

Course change [degrees]

28

Turn Slope [degrees]

28

Turn Time [seconds]

30

GPS enabled

☐

Accept own positions via KISS

☐

Allow GPS sleep while own positions received via KISS

☐

Additional settings for secondary frequency:
EXPERIMENTAL - USE WITH CARE!

Secondary Frequency [MHz]

(for cross-repeating or listening transmissions from igates)

433,755

TX power on secondary frequency [dBm]

0

Speed on secondary frequency

BW 125kHz CR 4:5 SF 12 (300bps) ▼

RX on frequencies

(Only honored, if we are NOT configured as WIDE1 or WIDE2 digi. If set to both frequencies: Ratio depends on how many packets are received on each qrg in a 10min window; we stay 20s on one qrg.)

RX on both frequencies ▼

Current RX Frequency:

434,855

Additional settings for mode repeater:
EXPERIMENTAL - USE WITH CARE!

LoRa Repeater Mode

Repeat if own call is addressed (recommended for normal users). default. ▼

Digipeat heard stations from MAIN frequency to which frequencies

(If LoRa Repeater Mode has not been set to off)

Repeat to both frequencies ▼

TX our beacon from this device or from klses to frequencies

(Only honored, if we are configured as WIDE1 or WIDE2 digi)

TX on main frequency ▼

APRS-IS settings

Enable APRS-IS connection

☒

Server Name

euro.aprs2.net

TCP Port

14580

Callsign (optional)

may be left blank

Password (required)

Filter (optional)

may be left blank

TX our beacon to APRS-IS

☐

Gate APRS-IS traffic to frequencies

(Will be "3rd-party encoded". Be careful - do not flood our slow main frequency! Use filters..)

Don't gate APRS-IS to RF (default) ▼

Connection status

Logged in

SAVE

Device Settings

OLED Display enabled

☒

Bluetooth enabled

☒

LED signalling

☐

Adjust CPU frequency (MHz)

80

Reboot every n hours

24

Auto power off

☒

Auto power off delay [s]

10

Display show RX time [s]

10

Display timeout [s]

15

Current Position

5006.61N 01859.28E [P]

Uptime of Device [min]

0

Satellite & Batt Info

S:-/- B:4.09V

SAVE

Received

Time (UTC)

Frame

RSSI

SNR

Actions

SHUTDOWN

REBOOT

FACILITY RESET

SEND BEACON

Update

Choose file...

Wybierz plik

Nie wybrano pliku

UPDATE

Click

[here](#)

to view your configuration..

Documentation

Tooltip

If you navigate your mouse over an input field / button, you see a detailed description what it does / which values are expected.

Info for SNR/RSSI path encoding

If enabled, add SNR and RSSI in path on reception, prefixed with "Q". Examples:

SNR 23 RSSI -73 -> Q2373

SNR -03 RSSI -104 -> QA3K4

SNR -13 RSSI -114 -> QB3L4

Still testing, if it behaves good to our network.

Use with care; resulting longer path consumes a bit more airtime.

User key functions (hardware buttons):

short press

If OLED is enabled and OLED is OFF:

- a short press will wake it up and show current data (as "Display Timeout" seconds)

If OLED is disabled or OLED is ON:

- with GPS-FIX immediate sending of a frame with the position from the GPS
- without GPS-FIX, immediate sending of the frame with the position saved in the configuration

long press

- toggle on or off WiFi and WebServer

Tips for reducing power (Usage as tracker only):

WiFi OFF

- be aware, that aprs-is connection depends on the Webserver and will stop working). Hack: long-pressing the (GPS) button switches ON/OFF the GPS. When switching GPS ON, the webserver-config is also set to value 1
- select option 0 to disable WiFi & APRS-IS
- select option 1 to disable WiFi if a bluetooth client is connected in between 60s on boot (recommended for portables, and for LORA32_21 devices)

LoRa Receiver OFF:

- reduces power consumption, if you just use the device as a tracker

Fixed Beacon off:

- Smart Beaconsing is activated, if there is no fixed beacon

Hardware notices

TTGO LoRa32 V2.1 (aka T3 V1.6.1)

Hardware limitation: if bluetooth is enabled and BT-client is connected, WiFi (-> Web-Server) does not work anymore.

You'll see the red LED while booting turned on for 60s as indicator for waiting for BT-clients. Hack: firmware compiled with -e ttgo-lora32-v2.1 and bluetooth configuration variable is set to enabled, now listens on boot up to one minute for your bluetooth device to connect.

If a bluetooth device connects, it does not start the Web-Server. Else, it closes SerialBT port and starts the Web-Server on LORA32_21 devices.

See also: new feature for switching WiFi off (i.e. if you use the device as portable tracker), if you don't need it: Webserver eats abt 80mA.

How to switch the Webserver on again, please read the long-press button (GPS) section.