

## VZLUSAT-2 transmission format

### Transmission in UHF band 435-438 MHz (beacon + telemetry)

Frequency: to be defined

Modulation: GMSK

Symbol rates: 1200 Bd – 9600 Bd

Framing: GomSpace Ax.100 framing format 5 (ASM+Golay), sync word 0xC9D08A7B MSB

Data field modification: CCSDS randomization

FEC: Reed-Solomon (223,255) block code

SDR implementation of GomSpace AX.100 modem with CCSDS can be found in this project:

<https://github.com/daniestevez/gr-satellites>

Data field content: to be defined...

### Transmission in S band 2400-2450 MHz (image data)

Frequency: to be defined

Modulation: QPSK, 8PSK

Symbol rate: 2 MBd

Framing: DVB-S2 Generic stream encapsulation

FEC: ModCod 1-17 (ETSI EN 302 307-1 V1.4.1 standard)

Data field content: to be defined...