PROTOCOLLO LoRa V2.4

Communication takes place in 4 steps, the step is identified by the 1st byte.
The 2nd byte identifies the sender and the 3rd byte the recipient.
To protect the communication, a "key" is generated at each sending, an array of 4 random bytes.
When a new packet is received, the received "key" is read and the "pass" is calculated with an operation known to both devices.
If the control passes, a new "key" is generated for the next exchange and I communicate my statuses, including LoraRssi and transmission errors.

TX REQUEST

Byte 0	**0x01**	Trasmission Request
Byte 1	0x01	ID sender
Byte 2	0x02	ID recipient
Byte 3	0xff	key_A[1]
Byte 4	0xff	key_A[2]
Byte 5	0xff	key_A[3]
Byte 6	0xff	key_A[4]
Byte 7	0x00	not used
Byte 8	0x00	not used
Byte 9	0x00	not used
Byte 10	0x00	not used
Byte 11	0x00	not used
Byte 12	0x00	not used
Byte 13	0x00	not used
Byte 14	0x00	not used
Byte 15	0x00	not used
Byte 16	0x00	not used
Byte 17	0x00	not used
Byte 18	0x00	not used
Byte 19	0x01	not used
Byte 20	0x02	not used
Byte 21	0x03	not used
Byte 22	0x04	not used
Byte 23	0x05	not used
Byte 24	0x59	not used
Byte 25	0x59	CRC check

TX REQUEST ack

Byte 0	**0x02**	ACK Trasmission Request
Byte 1	0x02	ID sender
Byte 2	0x01	ID recipient
Byte 3	0xff	key_B[1]
Byte 4	0xff	key_B[2]
Byte 5	0xff	key_B[3]
Byte 6	0xff	key_B[4]
Byte 7	0xff	pass_A[1]
Byte 8	0xff	pass_A[2]
Byte 9	0xff	pass_A[3]
Byte 10	0xff	pass_A[4]
Byte 11	0x00	not used
Byte 12	0x00	not used
Byte 13	0x00	not used
Byte 14	0x00	not used
Byte 15	0x00	not used
Byte 16	0x00	not used
Byte 17	0x00	not used
Byte 18	0x00	not used
Byte 19	0x01	not used
Byte 20	0x02	not used
Byte 21	0x03	not used
Byte 22	0x04	not used
Byte 23	0x05	not used
Byte 24	0x59	not used
Byte 25	0x59	CRC check

PROTOCOLLO LoRa V2.4

TX STATUS

Byte 0	**0x03**	Send status
Byte 1	0x01	ID sender
Byte 2	0x02	ID recipient
Byte 3	0xff	key_C[1]
Byte 4	0xff	key_C[2]
Byte 5	0xff	key_C[3]
Byte 6	0xff	key_C[4]
Byte 7	0xff	pass_B[1]
Byte 8	0xff	pass_B[2]
Byte 9	0xff	pass_B[3]
Byte 10	0xff	pass_B[4]
Byte 11	0xff	ChangeStatus
Byte 12	0xff	StatusIn1
Byte 13	0xff	StatusIn2
Byte 14	0xff	StatusOut1
Byte 15	0xff	StatusOut2
Byte 16	0xff	LoraRssi
Byte 17	0xff	nErr
Byte 18	0xff	nFail
Byte 19	0x00	hour
Byte 20	0x00	minute
Byte 21	0x00	second
Byte 22	0x00	day
Byte 23	0x00	month
Byte 24	0x00	year
Byte 25	0x59	CRC check

ACK Invio

Byte 0	**0x05**	ACK Send status
Byte 1	0x02	ID sender
Byte 2	0x01	ID recipient
Byte 3	0x00	not used
Byte 4	0x00	not used
Byte 5	0x00	not used
Byte 6	0x00	not used
Byte 7	0xff	pass_C[1]
Byte 8	0xff	pass_C[2]
Byte 9	0xff	pass_C[3]
Byte 10	0xff	pass_C[4]
Byte 11	0x00	not used
Byte 12	0x00	not used
Byte 13	0x00	not used
Byte 14	0x00	not used
Byte 15	0x00	not used
Byte 16	0xff	LoraRssi
Byte 17	0xff	nErr
Byte 18	0xff	nFail
Byte 19	0x00	hour
Byte 20	0x00	minute
Byte 21	0x00	second
Byte 22	0x00	day
Byte 23	0x00	month
Byte 24	0x00	year
Byte 25	0x59	CRC check