

Parameter Number	Parameter	Description	Default	Min Val	Max Val	Should be same on both ends?	Notes
0	SerialSpeed	UART comm rate	57600	4800	115200	No	Allowed: 2400, 4800, 9600, 14400, 19200, 38400, 57600, 115200
1	AirSpeed	Data rate over the air. Overrides bandwidth, spread, and coding.	4800	0	38400	Yes	Allowed: 0, 40, 150, 400, 1200, 2400, 4800, 9600, 19200, 28800, 38400
2	NetID	Network ID	192	0	255	Yes	
3	PointToPoint	Pair radios or allow multi-radio broadcasting	1	0	1	Yes	
4	EncryptData	Use AES-128-GCM for each packet	1	0	1	Yes	
5	EncryptionKey	16 byte key used for AES encryption	365734E4475672	0	16 Bytes	Yes	Both radios must have identical keys only if encryption is used.
6	DataScrambling	Apply IBM Data Whitening to reduce DC bias	1	0	1	Yes	
7	TxPower	Transmit power in dBm	30	14	30	No	
8	FrequencyMin	Minimum allowed radio frequency	902.0	902.0	≤Max	Yes	
9	FrequencyMax	Maximum allowed radio frequency	928.0	≥Min	928.0	Yes	
10	NumberOfChannels	Divide available spectrum by this amount	16	1	50	Yes	
11	FrequencyHop	Enable frequency hopping spread spectrum	1	0	1	Yes	
12	MaxDwellTime	Amount of time before hopping	400	10	65535	Yes	
13	Bandwidth	<a href="#">Low number is longer range, less datarate</a>	125.0	10.4	500.0	Yes	Allowed: 10.4, 15.6, 20.8, 31.25, 41.7, 62.5, 125.0, 250.0, 500.0
14	SpreadFactor	High number is longer range, less datarate	9	6	12	Yes	
15	CodingRate	<a href="#">Set LoRa link coding rate denominator</a>	7	5	8	No	
16	SyncWord	Set LoRa sync word	0x12	0	255	Yes*	
17	PreambleLength	Set LoRa preamble length	8	6	65535	Yes*	
18	FrameSize	Number of bytes received before transmission	253	16	253	No	
19	FrameTimeout	ms wait before partial frame is transmitted	50	10	2000	No	
20	Debug	Print extra debug statements	0	0	1	No	
21	Echo	Echo local serial	0	0	1	No	
22	HeartBeatTimeout	ms wait before sending link ping	5000	250	65535	No	
23	FlowControl	Use CTS/RTS	0	0	1	No	
24	AutoTune	Adjust frequency based on received frequency offset	1	0	1	No	
25	DisplayPacketQuality	Show RX packet RSSI, SNR, and FreqError	0	0	1	No	
26	MaxResends	Attempts before dropping packet	2	0	255	No	

\* These settings should be identical to link radios, but different settings do not guarantee exclusivity.