

GENERAL		rev.3 SPECIFICATION
Type	PCB module	
Usage	Control/command communication and sensor data exchange	
Data link type	Digital half-duplex	
MECHANICAL & ENVIRONMENTAL		
PCB dimensions & weight	W: 59 mm L: 52 mm H: 8 mm ; 14 g	
IP rating	IP65 with custom enclosure	
Operating temp. range	-40...+85 C	
Enclosure	Custom enclosure possible	
TECHNICAL DATA		
Raw data speed	250 kbps	
Delay	< 65 ms	
Output power	> +29.5 dBm	
Tested link range	LoS ~10 km per link; up to 20 km with repeater	
Frequency range	2400-2500 MHz ISM band, 1 MHz channel step	
Power input	+6...24 V, average 1 mA, max 550 mA	
Modulation type	GFSK	
Sensitivity	< -106 dBm typical	
Total link budget	136 dB	
Channel spacing	< 1 MHz	
Frequency hopping	2.4 GHz ISM band, 16 random channels	
Power consumption (TX/RX/Standby/Sleep)	TX 550 mA, RX 100 mA, average 1 mA @7,4V (client sleep mode < 50 uA, network active, connected, energy saving mode ON) . On sleep 10 uA	
Supplied battery	1000 mAh; In standby mode ~2 years. In working mode ~ 2-4 weeks	
Encryption	AES128	
REPEATER		
Number of active devices	5 pairs (remote controller + receiver module)	
Devices in queue	250	
SOFTWARE		
Protocol	Proprietary	
INTERFACES		
Serial port & speed	TTL 3.3V Full Duplex UART; async 9600 - 1 Mbaud	
Serial port protocol	Serial passthrough, CRSF, Propiertary	
USB	USB-C for charging, software updating and configuring	
Antenna Connector	U.FL	