

LLF051430

specification



product name	LLF051430
version number	3.0
date	2025.5.1

major function :

The LLF051430 utilizes a software-defined radio (SDR) architecture to establish a mesh network, with power amplifiers of varying capacities enabling flexible range adjustment.

Supports MESH networking with up to 10MHz bandwidth and 20Mbps throughput. Features smart frequency selection, AES256 encryption, and range-extended mode. Additionally supports smart frequency selection, heterogeneous frequency networking, and signal gun interference avoidance, ensuring true interference resistance.

parameter valve :

definition	parameter	definition	parameter
transmission distance	Ground-to-air 50 km (line of sight)	interface type	Network port*1\\232*2\\TTL*1 (default is the above interface, it can also be reused as 485/422 interface, the two interfaces cannot coexist)
service frequency	1.4GHz (customizable)	bandwidth of transmission	Single node maximum 2 0Mbps
transmitting power	0 - 30dBm±2	Configuration Tools	Web interface
channel bandwidth	1.25MHz/2.5MHz/5MHz/10MHz	service voltage	24V
receiving sensitivity	10MHz -103dBm	maximum current	1A
	5MHz -104dBm	maximum power	15±5W
temperature range	Storage: -40°C to +85°C	size	83.2 x 129.1 x 22.2mm
	Operating temperature: -40°C to +55°C	weight	

Devices in the 0.7-2.7GHz frequency band can be customized to meet customer requirements and on-site conditions.

*Supports up to 3 nodes and 1 or 2 hops.

Typical application:



Typical Application of 3-node 2-hop Mesh Ad-hoc Network

Interface parameters and indicator lights:

The LLF051430 indicator light faces upward, with the following components from left to right:

Dual-color indicator light: Green indicates normal power supply (light on), while red signals FPGA program completion (light off).

Dual-color light 2: Signal intensity indicator, displaying green, yellow, and red in descending order, or none.

Dual-color light 3: Chain-building indicator: green for building, red for breaking.

Dual-color light 4: 100Mbps network port indicator.

Dual-color light 5: 10Mbps network port indicator.

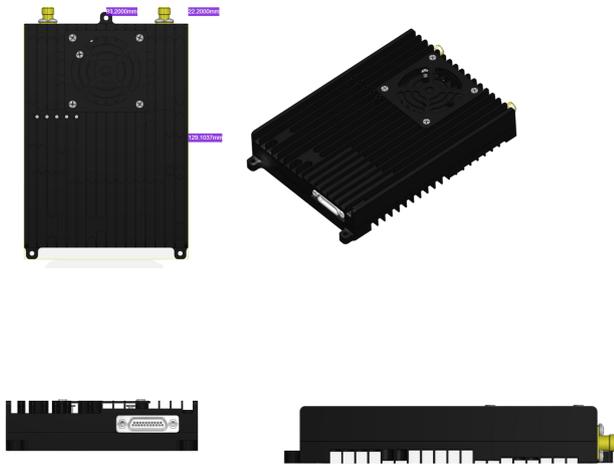
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Radio frequency port 2: SMA-K package.

Radio frequency port 1: SMA-K package.

LLF051430 features a J21-pin aviation connector at its base, including power supply, 1 Ethernet port, and 3 serial ports.

Structure diagram (unit: mm):



Accessory information:

name	specifications and models	quantity	remarks
J21 tail line	J21	1	interface line