

## SDL530 Long Range Data/Video Wireless Transceiver

- TDD OFDM full duplex wireless transceiver for video and data Link
- Up to 30Mbps Iperf Throughput @20MHz channel
- Supports Point-to-Point and Point-to-Multipoint Networks
- Interface through web browser
- 2 Ethernet and 1 TTL uart data link



Sihid SDL530 was designed for video and data wireless transmission with two way wireless data link. This OFDM radio device works at 800MHz or 1.4GHz bands, with frequency hopping technology (FHSS) to make sure better stability signal communication.

### Features:

- TDD OFDM modulation
- Supports 806~826MHz band or 1428~1448MHz band
- Supports FHSS inside each band
- 1.4/3/5/10/20MHz band widths
- Maximum 30Mbps@20MHz throughput
- RF transmission maximum power: 2W or 5W
- Constellation: QPSK, 16QAM, 64QAM, self-adaption

- Sensitivity: -108dBm(1Mbps)
- Supports IP data transmission(2 Ethernet port)
- Supports serial data transmission(1 channel, TTL)
- 1~7km(ground-to-ground), 30~100km(UAV-to-ground, optional distance grade)
- Web UI for management
- AES128 encryption
- Uplink and downlink stream control
- Networking mode: Point-to-Point, Point-to-Multipoint, Relay, and Mesh(specify)
- Movement Speed: Supports no less than 120km/h
- Compact size and light weight
- Rugged aluminum alloy housing
- Power input: 12~16V(2W), 24~25V(5W)
- Power consumption: <12W(RF Power 2W), <18W(RF Power 5W)
- Dimensions: 102\*52\*21.5mm
- Weight: 120g

## Specification

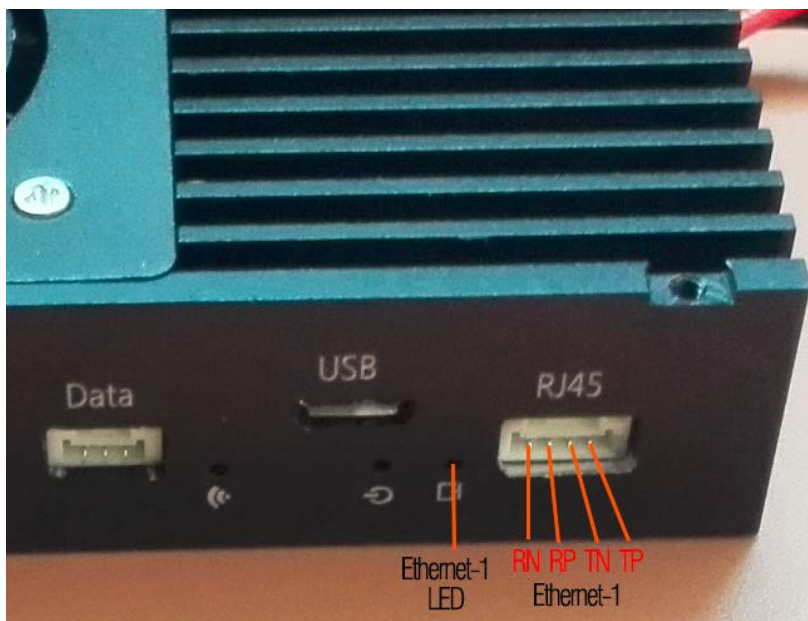


| Number | I/O            | Description   |
|--------|----------------|---|
| 1      | ANT2           | Rx Antenna port, SMA female                           |
| 2      | ANT1           | Tx/Rx Antenna port, SMA female                        |
| 3      | Power in       | VDD: red cable GND: black cable                       |
| 4      | Data UART      | 3PIN PH1.25mm lockable Connector                      |
| 5      | Link LED       | Green, light on wireless linked(only for Access Node) |
| 6      | USB device     | Micro USB, for software upgrading                     |
| 7      | Power LED      | Red, light on normal powered                          |
| 8      | Ethernet 1 LED | Green, blinks on data transmission                    |
| 9      | Ethernet 1     | 4PIN PH1.25mm lockable Connector                      |
| 10     | Ethernet 2 LED | Green, blinks on data transmission                    |
| 11     | Ethernet 2     | 4PIN PH1.25mm Connector                               |

## I/O Signal

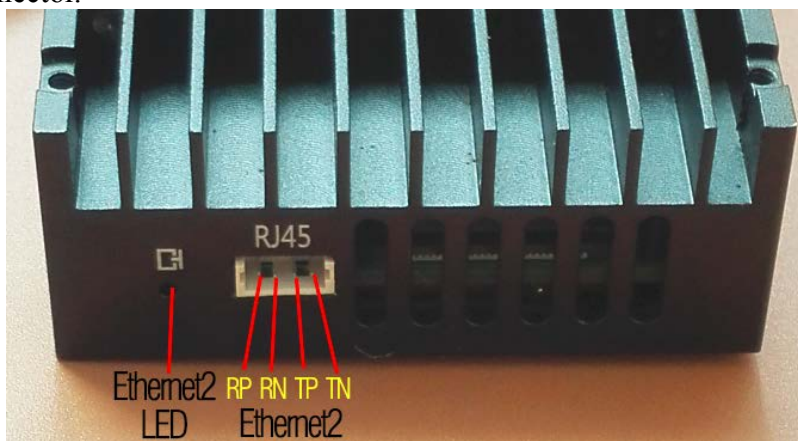
### Ethernet 1

Ethernet 1 is bridged connection with Ethernet 2 on board inside the device. It's a 4PIN PH1.25mm lockable connector.



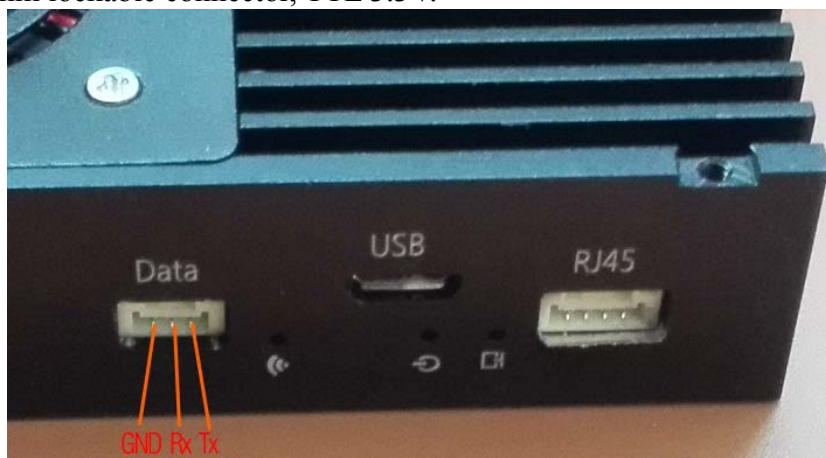
**Ethernet 2**

Ethernet 2 is bridged connection with Ethernet 1 on board inside the device. It's a 4PIN PH1.25mm connector.



**Data uart**

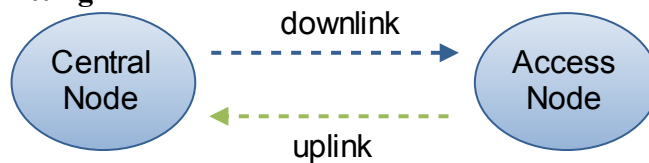
3 PIN PH1.25mm lockable connector, TTL 3.3V.



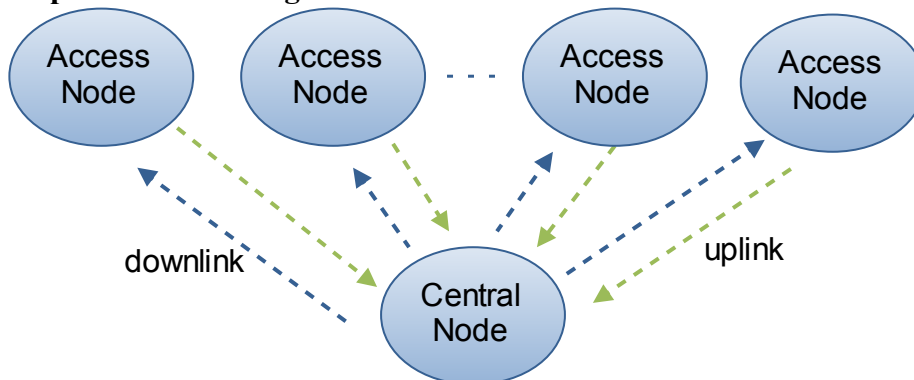
## Wireless networking with SDL530

SDL530 supports two operating modes: Access Node or Central Node. It can be managed through web UI. SDL530 supports features of maximum 16 Access Nodes connected to a Central Node. All of the Nodes are in a same wireless LAN and share the whole transmission bandwidth (maximum 30Mbps@20MHz throughput). Data from Central Node to Access Node, we call downlink, and data from Access Node to Central Node, we call uplink. Uplink and downlink stream ratio can be controlled through web UI. When using SDL530 for Point-to-Point transmitting, uplink and downlink share the whole transmission bandwidth (maximum 30Mbps@20MHz throughput) too. SDL530 supports networking mode: Point-to-Point, Point-to-Multipoint, Relay, and Mesh (specify mesh version when order).

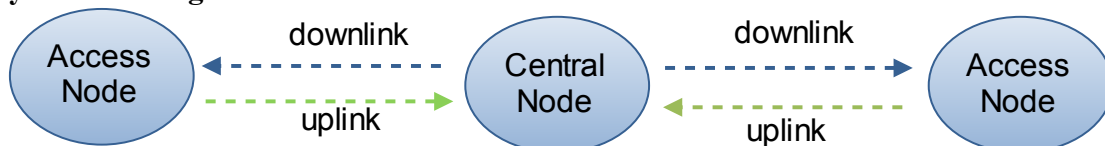
### Point-to-Point transmitting



### Point-to-Multipoint transmitting



### Relay transmitting



### Mesh transmitting (Specify)

