Specification of UZI-FDD- 50W-1510-48VGaN

Features:

- High reliability, stability and consistency
- Small size and low power consumption
- Equipped with power, VSWR, temperature and fault detection functions, as well as active fault reporting capability
- With ATT and ALC control functions
- Monitoring function: RS485 protocol, providing module testing software
- Complete product series with comprehensive power levels to meet different application requirements

Technical Specification:

Product Name:

1. UZI-FDD-B1-2.1G-50W-1510-48VGaN
2. UZI-FDD-B3-1.8G-50W-1510-48VGaN
3. UZI-FDD-B5-800M-50W-1510-48VGaN
4. UZI-FDD-B7-2.6G-50W-1510-48VGaN
5. UZI-FDD-B8-900M-50W-1510-48VGaN

Cautions:

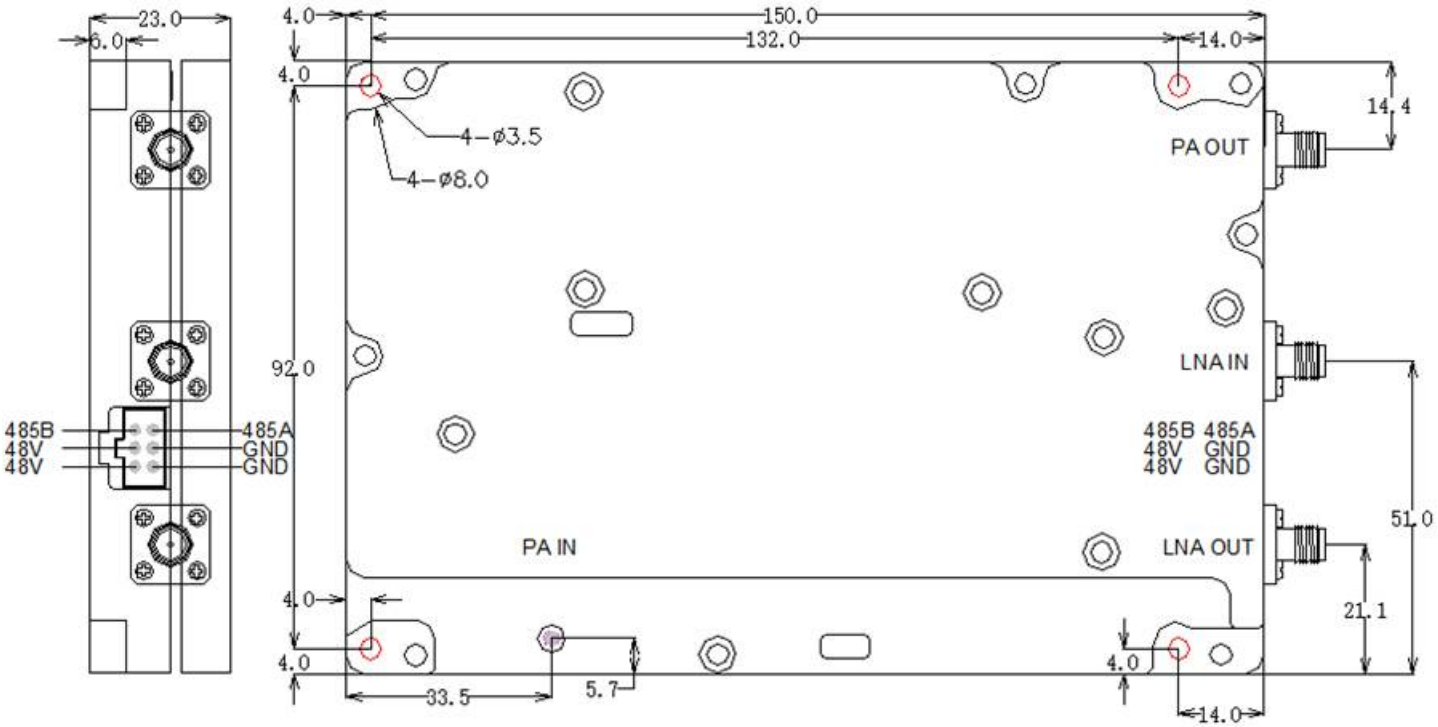
1. Gallium nitride, 48V dual-line power supply

Items:	Uplink (UL) & Downlink (UL) Specifications:
Frequency Range:	1. B1:

	a. UL:1920-1980MHz b. DL:2110-2170MHz 2. B3 a. UL:1710-1785MHz b. DL:1805-1880MHz 3. B5 a. UL:824-849MHz b. DL:869-894MHz 4. B7 a. UL:2500-2570MHz b. DL:2620-2690MHz 5. B8 a. UL:880-915MHz b. DL:925-960MHz
Max Gain:	1. UL:25±2dB 2. DL:53±2dB
Maximum Output Power:	1. UL:Uncontrolled 2. DL:44±1dBm
Maximum Input Level:	1. UL:NONE 2. DL:+10dBm
Gain Adjustment Range:	1. UL:NONE 2. DL:≥25dB
ALC Range:	1. UL:NONE 2. DL:≥10dB
Gain Flatness:	1. UL:NONE 2. DL a. ATT10dB：≤±1dB b. ATT20dB：≤±1dB c. ATT25dB：≤±1.5dB
In-Band Ripple:	1. UL:≤2dB 2. DL:≤2dB
Noise Figure:	1. UL:≤3dB

	2. DL:NONE
EVM:	⩽5% (Peak-to-Average Power Ratio 10.0dB)
VSWR:	1. ⩽1.4 (Test condition: power on for testing after turning off the uplink power amplifier.) 2. ⩽1.4 (Test condition: power on for testing after turning off the downlink power amplifier.)
Operating Voltage:	48V
Operating Current:	⩽3.5A
Baud Rate:	19200
Working Temperature:	-40～+55°C
Over-Temperature Protection:	Alarm and shutdown at +85°C, resume operation at 65°C
Monitoring Functions:	1. For the wiring diagram of the monitoring port, refer to the outline dimension drawing; RS485 interface communication a. Settings: switch, gain; b. Query: module status (including power amplifier status, over-power alarm, over-temperature alarm), power amplifier temperature, power amplifier ATT value, detected forward power; c. Over-power alarm: alarm when the power exceeds the maximum output power by +2dB; d. Over-temperature alarm: recommended threshold is +85°C; alarm is triggered when the detected temperature exceeds +85°C, and the power amplifier is turned off simultaneously, then turned on at +65°C; e. Power amplifier temperature detection: the detection range shall include but not be limited to -25°C～+85°C, with a detection accuracy of ±3°C; f. Forward power detection: the detection range shall be greater than 20dB, with a detection accuracy of less than ±1dB;
Connecters:	4 connectors: PA IN is an MCX connector, and the rest are SMA connectors.
Mechanical dimensions:	150*100*23

Dimensional Drawing:


23.0
6.0
4.0
150.0
132.0
14.0
4.0
14.4
4-ø3.5
4-ø8.0
PA OUT
92.0
LNA IN
485B
48V
48V
485A
GND
GND
485B 485A
48V GND
48V GND
51.0
PA IN
LNA OUT
21.1
4.0
4.0
4.0
33.5
5.7
14.0

Sample:


PA OUT
LNA IN
485B 485A
48V GND
48V GND
LNA OUT
PA IN