

# Specification of UZI-AUDS-50W-16550-485



## Features:

1. Wideband Multi-frequency Operation — Covers three frequency bands (3480–3520 MHz, 3540–3860 MHz, 3700–4000 MHz) with high gain ( $51 \pm 1$  dB) and  $47 \pm 1$  dBm output power for flexible deployment.
2. Comprehensive Monitoring & Protection — Features RS485 monitoring with real-time status queries, over-power/over-temperature alarms, and VSWR protection that automatically reduces power to 3W when needed.

## Technical Specification:

### Product Name:

1. UZI-AUDS-3480~3520M-50W-16550-485
2. UZI-AUDS-3540~3860M-50W-16550-485
3. UZI-AUDS-3700~4000M-50W-16550-485

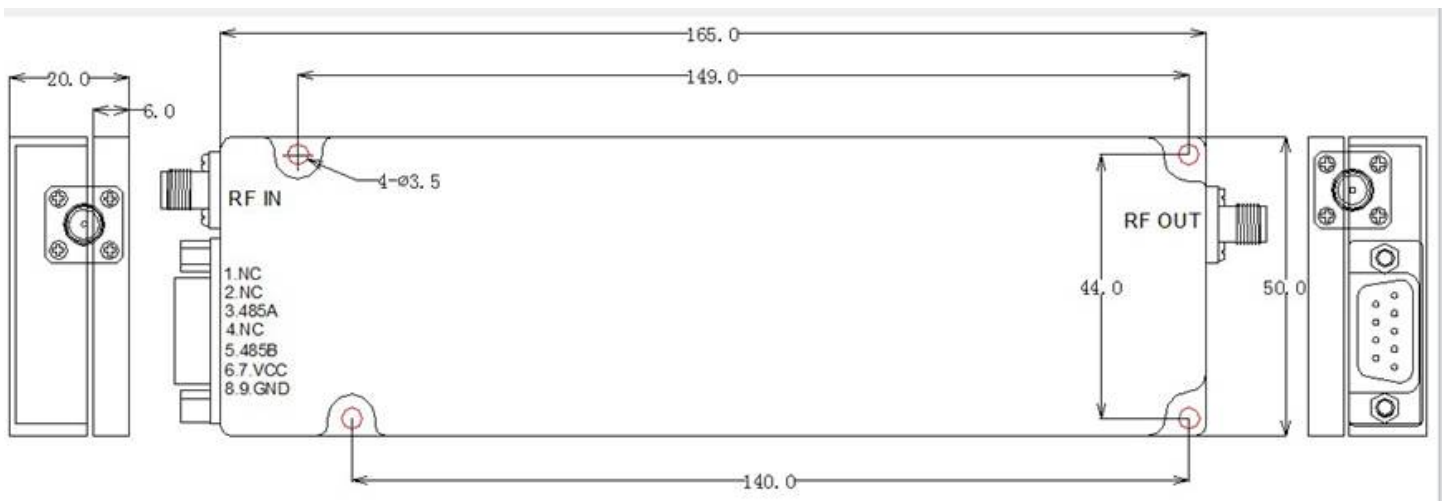
### Cautions

1. Single-tone signal test.
2. The power amplifier has a 485 function.
3. Temperature alarm and protection: Alarm at  $85^{\circ}\text{C}$  and turn off the power amplifier simultaneously; turn on the power amplifier at  $65^{\circ}\text{C}$ .
4. VSWR (Voltage Standing Wave Ratio) alarm protection: After VSWR alarm, the power amplifier power drops to 3W; when VSWR returns to normal, the power amplifier automatically returns to normal.

Items:	Quality Standards
Frequency Range	<ol style="list-style-type: none"> <li>1. 3480-3520M</li> <li>2. 3540-3860M</li> <li>3. 3700-4000M</li> </ol>
Max Gain:	<ol style="list-style-type: none"> <li>1. <math>51 \pm 1\text{dB}</math></li> </ol>
Maximum Output Power:	<ol style="list-style-type: none"> <li>1. <math>47 \pm 1\text{dBm}</math></li> </ol>
Maximum Input Level:	<ol style="list-style-type: none"> <li>1. <math>+10\text{dBm}</math></li> </ol>
Manual Gain Control:	<ol style="list-style-type: none"> <li>1. <math>\geq 25\text{dB}</math></li> </ol>
Automatic Gain Control:	<ol style="list-style-type: none"> <li>1. <math>\geq 10\text{dB}</math></li> </ol>
Gain Flatness:	<ol style="list-style-type: none"> <li>1. ATT10dB: <math>\leq \pm 1\text{dB}</math></li> <li>2. ATT20dB: <math>\leq \pm 1\text{dB}</math></li> <li>3. ATT25dB: <math>\leq \pm 1.5\text{dB}</math></li> </ol>
In-band Ripple:	$\leq 2.5\text{dB}$
VSWR	$\leq 1.4$
Operating Voltage:	28V
Operating Current:	$\leq 6\text{A}$
Working Temperature:	$-40 \sim +55^{\circ}\text{C}$
Over-Temperature Protection:	Alarm and shutdown at $+85^{\circ}\text{C}$ , resume operation at $65^{\circ}\text{C}$
Baud Rate:	19200
Connectors:	2 SMA connectors
Chassis Dimension:	165*50*20
Monitoring	<ol style="list-style-type: none"> <li>1. For the wiring diagram of the monitoring port, refer to the outline dimension drawing; RS485 interface communication <ol style="list-style-type: none"> <li>a. Settings: switch, gain;</li> <li>b. Query: module status (including power amplifier status, over-power alarm, over-temperature alarm), power amplifier temperature, power amplifier ATT value, detected forward power;</li> </ol> </li> </ol>

- 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  $\pm 3^{\circ}\text{C}$ ;
- f. Forward power detection: the detection range shall be greater than 20dB, with a detection accuracy of less than  $\pm 1\text{dB}$ ;

## Dimensional Drawing:



## Sample:

