

# The Specification of UZI-TDD 1.3-1.5G

## UL/DL PA 40W Draft

### Features:

- High reliability, stability and consistency
- Ad - Hoc Network Application: Specifically designed for ad - hoc network scenarios, enabling flexible and decentralized network deployment without relying on fixed infrastructure.
- Uplink Filtering & Low Noise: Incorporates uplink filtering to suppress interference, and the uplink noise figure is  $\leq 5\text{dB}$ , minimizing signal noise during amplification.
- High Gain & Stable Output: Provides a maximum gain of  $10 \pm 2\text{dB}$  for uplink and  $51 \pm 2\text{dB}$  for downlink, with the downlink having a stable maximum output power of  $46 \pm 1\text{dBm}$  for reliable signal transmission.

### Technical Specification:

#### Product Name:

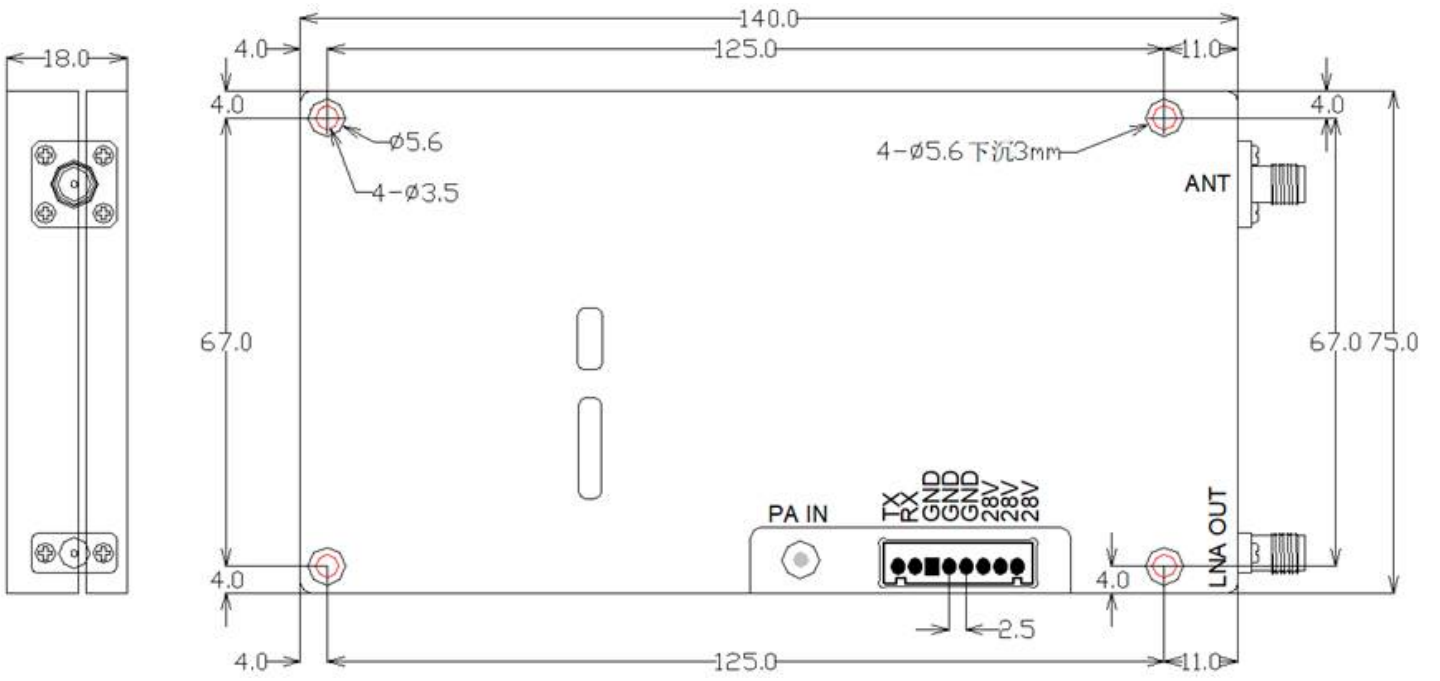
1. UZI-TDD-1.3~1.5G-40W-14075-28V

Items:	Uplink (UL) & Downlink (DL) Specifications:
Frequency Range:	<ol style="list-style-type: none"><li>1. UL:1300-1500MHZ</li><li>2. DL:1300-1500MHZ</li></ol>
Max Gain:	<ol style="list-style-type: none"><li>1. UL:<math>10 \pm 2\text{dB}</math></li><li>2. DL:<math>51 \pm 2\text{dB}</math></li></ol>
Maximum Output Power:	<ol style="list-style-type: none"><li>1. UL:Uncontrolled</li><li>2. DL:<math>46 \pm 1\text{dBm}</math></li></ol>
Maximum Input Level:	<ol style="list-style-type: none"><li>1. UL:NONE</li><li>2. DL:<math>-2\text{dBm}</math></li></ol>
Gain Adjustment Range:	NONE
ALC Range:	NONE
In-Band Ripple:	$\leq 2.5\text{dB}$

Noise Figure:	1. UL: $\leq 5\text{dB}$ 2. DL: NONE
Transmit-receive switching delay:	$\leq 2\mu\text{s}$
Tx-Rx Isolation:	$\geq 55\text{dBc}$
EVM:	$\leq 5\%$ (Peak-to-Average Power Ratio 10.0dB)
VSWR:	$\leq 1.4$ (Test condition: power on for testing after turning off the downlink power amplifier.)
Operating Voltage:	26-30V
Operating Current:	With pre-distortion: $\leq 4.5\text{A}$
Working Temperature:	$-40\sim+55^{\circ}\text{C}$
Over-Temperature Protection:	Alarm and shutdown at $+85^{\circ}\text{C}$ , resume operation at $65^{\circ}\text{C}$
Monitoring Functions:	NONE
Transmit - receive wire control interface:	CMOS3.3V
Connecters:	There are 3 connectors in total: PA IN: MCX connector; The remaining ones: SMA connectors
Mechanical Dimensions:	140*75*18

## Dimensional Drawing:

- RX:LNA (uplink) switch, CMOS 3.3V high level turns it on, low level turns it off.
- TX: PA (downlink) switch, CMOS 3.3V high level turns it on, low level turns it off.



Sample:

