

ZPA-10 is a 10 W TDD integrated bidirectional RF power amplifier launched by Zencheer. Measuring 121.6 × 90 mm, it operates over 500–1500 MHz and delivers high-linearity output, making it compatible with our Mesh radios.

## Key Features

- Integrated TX/RX amplifiers, TDD mode
- Operating band can be customized on request
- Maximum output power up to 40 dBm



## Specifications

<b>Frequency Range</b>	500–1500 MHz
<b>Bandwidth</b>	20–100 MHz
<b>TX Channel</b>	
Gain	13 dB ± 1 dB
Output Power	40 dBm ± 1 dB
EVM	≤ -25 dB @ 40 dBm ≤ -28 dB @ 37 dBm
<b>RX Channel</b>	
Gain	5 dB ± 1 dB
<b>RF Connectors</b>	SMA
<b>Control Interface</b>	
Connector	SMA
Switch Logic	Logic high (1.8–3.3 V) enables TX Logic low (0 V) enables RX
Switching Time	< 1 μs
<b>Supply Voltage</b>	28 V ± 4 V
<b>Dimensions</b>	121.6 × 90 × 26 mm
<b>Temperature Range</b>	Storage: -40 °C to +125 °C Operating: -20 °C to +65 °C
<b>Current Consumption</b>	2A Max@28 V

## Interface Definitions

Interface	Description
IN	RF signal I/O, connect to the RF module
OUT	PA output and LNA input, connect to the antenna
CTRL	TX/RX control signal
PWR	2-pin power connector for PA power input: Pin 1 is positive (+), Pin 2 is negative (-)

## Ordering Information

Model	Frequency Range	TX Gain	TX Power	RX Gain
ZPA580-10	565–595 MHz	13 dB	40 dBm	6 dB
ZPA616-10	566–616 MHz	13 dB	40 dBm	6 dB
ZPA1400-10	1428–1448 MHz	13 dB	40 dBm	6 dB

Physical Size

