

TDD-1500-2*5W RF Module Specifications (2T2R Dual Transmit, Dual Receive)

SN:20230531001

| Test Project | Indicators | Remark |
|----------------------------------|---|----------|
| ----- LNA Section ----- | | |
| Operating frequency (MHz) | 1428~1468MHz | |
| Maximum output power (dBm) | 0±1 | |
| Maximum gain (dB) | 10±1 | |
| Gain flatness (dB) | ≤1.5(Peak-to-peak value within the operating frequency band) | |
| Input port VSWR | ≤1.4 | |
| Output port VSWR | ≤1.4 | |
| ACPR(WCDMA) | ACPR of adjacent channel ≤ -45 dBc | |
| stray emission | Within the operating frequency band: ≤-36dBm/30kHz Outside the operating frequency band: ≤-30dBm/30kHz | |
| Maximum input level | ≥-10dBm | |
| Uplink and downlink isolation | ≥70dB | |
| Power stability | ±1dB@25°C~+55°C | |
| Gain stability | ±1dB@25°C~+55°C | |
| ----- PA Section ----- | | |
| Operating frequency (MHz) | 1428~1468MHz | P1=43dBm |
| Output power (dBm) | 37±1 dBm | |
| Maximum gain (dB) | 42±1 | |
| Gain flatness (dB) | ≤1 (Peak-to-peak value within the operating frequency band) | |
| ACPR(WCDMA) | ACPR of adjacent channel ≤ -36 dBc | |
| Input/output port VSWR | ≤1.4 | |
| stray emission | Operating frequency band: ≤-36dBm/30kHz Outside the operating frequency band: ≤-30dBm/30kHz | |
| Power stability | ±1dB@25°C~+55°C | |
| Gain stability | ±1.5dB@25°C~+55°C | |
| public areas | | |
| Power supply requirements | +18-26VDC; ≤1.1A (single-channel current) | |
| PA/LNA switching characteristics | TTL level, +3.3V (PA on, LNA off), 0V (PA off, LNA on). | |
| Switch delay time | ≤2us | |
| Operating ambient temperature | -25~+65°C | |

2 Interface Definition

1) RF input connector: MCX-KHD;

RF output connector: MCX-KHD;

2) switch interface:

Pin 2 connects to a TDD switch: PA low level is off, high level (1.8-3.3V) is on;

The LNA is on when low level is on and off when high level (1.8-3.3V).

1. Pin 3 NC (Pin 3 high level for debugging)

Pins 5 and 6 connected to GND

Pins 7 and 8 are connected to +18-26V.

3. Appearance Requirements

1) External dimensions: 76×50×11.5mm

2) Module shape

