

# DTT5900

## 200W-600W DVB-T2 Transmitter

DIBVISION | DIBSYS



200W



300W-500W



600W

**DTT5900 is a professional DVB-T2 Digital Transmitter** with 200W/300W/400W/500W/600W power optional. Its compact structure design has greatly saved space for your room. The frequency range of DTT5900 is from 470MHz~806MHz, it has a high linear and high reliability as it takes high gain and high linear LDMOS tube amplifier module. Furthermore, it supports AGC function to keep sustained power output.

DIBSYS is always ready to meet customer requirements by making it available to output signal carrier or multi-carrier, adapt to signal channel and broadband transmission. We performs all required DVB-T2 transmitter measurements, from the initial acceptance testing for the transmitter, to measurements performed during commissioning and preventive maintenance.

### Key Features

- Improved signal transmitting quality
- Intelligent, modularized amplifier unit, takes high power gain and high linear LDMOS tube amplifier module design
- Support MFN and SFN system
- Low power consumption super linear design, improve the transmission power of the transmitter, and reduce the nonlinear distortion
- Support AGC function, with sustained power output, to approve the transmitter have good stability and reliability
- LED on the front panel supporting alarm and signal monitor
- Air cooling system with low consumption and low noise
- Multi lightning protection design, good protection for whole equipment.
- 24 hour working unmanned
- Easy to install, user friendly design

## TECHNICAL SPECIFICATIONS

### Basic Parameter

|                           |  |
|---------------------------|--|
| Standard                  | DVB-T2   |
| Modulation Mode           | support 4/16/32/64 QAM mode  |
| Working frequency         | 470MHz~806MHz  |
| Output rating             | 200W/300W/400W/500W/600W Optional  |
| Frequency accuracy        | MFN: $\leq \pm 100\text{Hz}$ / SFN: $\leq \pm 1\text{Hz}$  |
| L.O. Phase Noise          | $\leq -70\text{dBc}@10\text{Hz}$<br>$\leq -90\text{dBc}@100\text{Hz}$<br>$\leq -100\text{dBc}@1\text{kHz}$<br>$\leq -105\text{dBc}@10\text{kHz}$<br>$\leq -115\text{dBc}@100\text{kHz}$<br>$\leq -130\text{dBc}@1\text{MHz}$ |
| variation of output power | $\pm 0.2\text{dB}$   |
| Inband spectrum ripple    | $\pm 0.5\text{dB}$ (fc $\pm 3.591\text{MHz}$ )   |
| Shoulder Level            | $\leq -40\text{dB}$ @ Central frequency, IF $\pm 4.2\text{MHz}$  |
| MER                       | $\geq 36\text{dB}$   |

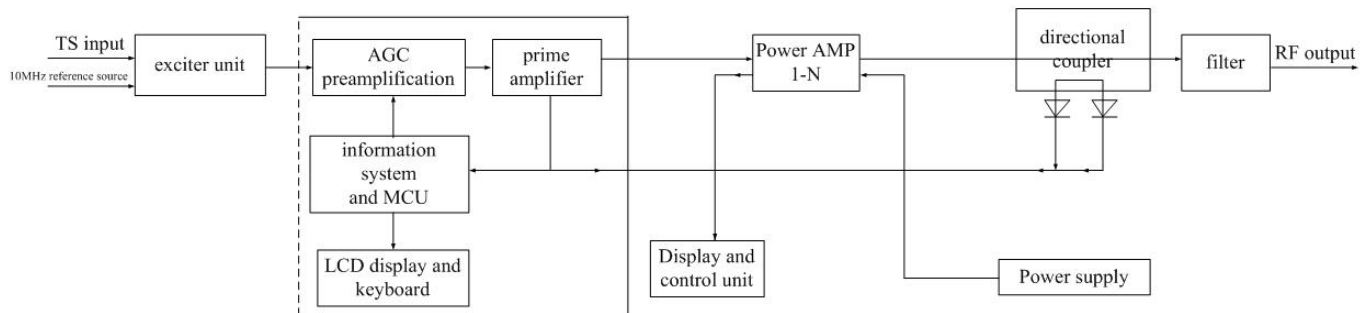
### Output Character

|                        |  |
|------------------------|--|
| Output impedance       | 50 $\Omega$  |
| output reflection loss | $\geq 20\text{dB}$                                       |
| Output interface       | 200W/300W/400W: L29-K;<br>500W/600W: 1-5/8", directy-fed |

### Environment Condition

|                          |  |
|--------------------------|--|
| Working temperature      | -20~+50 $^{\circ}\text{C}$                             |
| Storage temperature      | -30~+75 $^{\circ}\text{C}$                             |
| Relatively humidity      | <95% (25 $^{\circ}\text{C}$ no condensation)           |
| Cooling mode             | inside cooling fan                                     |
| atm press                | 86~106kPa  |
| power supply             | AC, 220 $\pm 20\%$ , 50Hz<br>AC, 380 $\pm 20\%$ , 50Hz |
| Machine room requirement | less dust, no friction                                 |

## Principle Chart



## Main Components List (Standard Configuration)

| S/N | Component       | 200W         | 300W | 400W | 500W | 600W | Remarks   |
|-----|-----------------|--------------|------|------|------|------|---|
|     |                 | Qty (piece)  |      |      |      |      |   |
| 1   | Cabinet/Rack    | N/A          | 1    | 1    | 1    | 1    | These configuration is standard. If customer need certain redundancy component, it is available and negotiable. |
| 2   | Power Supply    | 1 (Built-in) | 1    | 1    | 1    | 2    |   |
| 3   | Exciter         | 1 (Built-in) | 1    | 1    | 1    | 1    |   |
| 4   | Power Amplifier | 1 (Built-in) | 1    | 1    | 1    | 2    |   |
| 5   | Monitor Unit    | N/A          | 1    | 1    | 1    | 1    |   |
| 6   | Filter          | 1 (Built-in) | 1    | 1    | 1    | 1    |   |