

TY-3516A 16W Ku Digital Indoor Transmitter

Technical Specification V3.01

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Overview



Outline

Thanks for your interested in our products.

TY-3516A **Ku band digital outdoor transmitter** is a kind of wireless digital TV signal transmission device newly developed by TYE. It works on Ku band (10.7GHz -12.0GHz), and output power 16W. The indoor type adopts modularization design and high power output. The series transmitter can be widely used in wireless point to point signal transmission system and omnidirectional transmission system. It applies to multiple digital modulation modes DVB-S/S2 and can be used for multi-channel digital TV signal coverage over a range of 30km. It is also widely used as a satellite uplink power amplifier (frequency can be specified by user). Today, this kind of transmitter offers the best technical proposal which can replace MMDS signal coverage.

Main features

- The Ku series transmitter is specifically researched, designed and produced according to the demands of customers.
- With a wide frequency band, large program capacity and strong ability of anti-interference. Operation frequency: 10700-12000MHz.
- Optional Output Power: 200mW/2W/4W/ 8W/10W/12W/16W/24W.
- Indoor type with large LCD panel system real time working condition, maintenance and management of system can be achieved easily.
- Low cost in receiver: TV signal can be easily received with any Ku Receiving antenna existing in market installed.
- With the all-aluminium material and outdoor structure, its convenient modular design can arrange on antenna directly to reduce the loss of feeder.
- With design of rain-proof and moisture proof around the clock.
- With simple process in installment and debugging.

- Convenience in maintenance.
- Combined Ku series transmitter with MMDS/DVB-T transmitters of TYE, we can build seamless coverage system with higher cost performance.
- With RFU modularization, broadband and high consistency design, super-linear and all-solid-state power amplifier.
- Automatic Level Control in larger dynamic range(ALC); Automatic Gain Control(AGC); adaptation of wide dynamic range in different environments.
- With over-VSWR, over-voltage, over-current, over-heat and lighting auto-protective functions.
- With extended interface for remote control and GSM message auto-alarm system (optional), concentrated monitoring can be achieved.
- With the international and the domestic advanced level of the design and production of equipment.
- Succeed used in Philippines, Laos, Indonesia, Somalia, Mexico, South Africa and other regions and countries.

| Model | TY-3516A | | |
|-----------------------------|--|--|--|
| | | | |
| Power Level | 16W | | |
| RF Output Frequency Range | 10.7~12.0GHz(frequency band carrier signal takes could be set arbitrarily, or specified by user) | | |
| Bandwidth | Maximum Bandwidth≤300MHz | | |
| Modulation Mode | DVB-S/S2,QPSK | | |
| Power Levels | 200mW/2W/4W/ 8W/10W/12W/16W/24W optional | | |
| RF Output Interface | N50K or BJ120 waveguide connector Return Loss: 20dB | | |
| RF Frequency Response | BW: 300MHz Passband Fluctuation: ≤2.0dB Any Within 10MHz:≤1.0dB | | |
| Group Delay Characteristics | ≤40nsec | | |
| IF Input Level | -25~-10dBm | | |
| IF Signal Input Frequency | 950~2150MHz(or customized) | | |
| IF Input Interface | 75Ω/F connector Return Loss: 15dB | | |
| In-band Spur Restraint | -60dBc(relative digital signal level) | | |
| Automatic Level Control | ≥20dB | | |
| Gain Control Error | Gain Control: 0~20dB,error≤±0.5dB | | |
| | Gain Control: 20~31dB,error≤±0.75dB | | |

Technical Specifications

| Gain Control Range | 0~31dB, 1.0dB stepping | | |
|--------------------------|---|--|--|
| Environmental Conditions | Working Temperature Range: -20°C~+45°C Humidity: no condensation Relative Humidity: 0~95% nonsaturation | | |
| Working Voltage | AC 220V±10%,50/60Hz | | |
| Package Size (L*W*H) | 61*43*41cm | | |
| Package Weigh | 31Kg | | |
| Remote Control | Remote administration and SMS alarm function(optional) | | |

TYE Series Transmitters

| ltem | Product name | Frequency Range | Output Power | System |
|------|---|--------------------|-----------------|---|
| 1 | VHF Analog TV Transmitter | 170MHz-230MHz | 20W-2KW | PAL/NTSC/SECAM |
| 2 | VHF Digital TV Transmitter | 170MHz-230MHz | 5W-300W | DVB-T/T2/S/S2/C,QAM |
| 3 | VHF Live/Mobile Transmitter | 300MHz-350MHz | 5W-30W | Point to point transmission |
| 4 | UHF Analog TV Transmitter | 470Mhz-860MHz | 20W-2KW | PAL/NTSC/SECAM |
| 5 | UHF Digital TV Transmitter | 470Mhz-860MHz | 10W-1KW | DVB-T/T2/S/S2/C,QAM |
| 6 | L Band TV Transmitter | 1.3GHz-1.5GHz | 20W-50W | DVB-T/T2/S/S2/C,QAM Point to point transmission |
| 7 | S Band (MMDS) Digital TV Transmitter | 2.0GHz-2.9GHz | 10W-500W | DVB-T/T2/S/S2/C,QAM, Point to point transmission , PAL/NTSC/SECAM(Analog signal) |
| 8 | 8GHz TV Transmission Module Set | 7.8GHz-8.3GHz | 500mW-2W | DVB-S/S2(8PSK/QPSK) Point to point transmission |
| 9 | Ku Band (MVDS) TV Transmitter | 10.7GHz-12.0GHz | 200mW-24 W | DVB-S/S2(8PSK/QPSK) Point to point transmission |