

# TY-3524A 24W Ku Digital Indoor Transmitter

# Technical Specification V3.01

Chengdu Tengyue Electronics Co., LTD.

Add: 518 5F, E-trade Building, 126 Yihuan Road East 2nd Section, Chengdu City, 610052, China
TEL: 86 (28) 84303287 FAX: 86 (28) 84310769 Wechat:tye\_catherine
E-Mail: catherine@rftye.com Skype: tye.catherine WEB: http://www.rftye.com

#### **Overview**



#### Outline

Thanks for your interested in our products.

TY-3524A **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 24W. 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-3524A		
Power Level	24W		
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	32Kg		
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