

# TY-2101B 10W L Band Wireless Digital TV transmitter/Gap Filler

Technical Specification V3.01

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#### **Overview**



#### **Outline**

Thanks for choosing our products.

TY-2101B 10W L Band Wireless Digital tv audio transmitter is a kind of wireless digital TV signal transmission device newly developed by TYE. It works on L band (1GHz -1.6GHz) and supports input optical fiber or radio frequency signals. The transmitter adopts outdoor water-proof structure and high power output. The L band transmitter is designed from 10W~50W, and meets with multiple modulation mode like DVB-S, DVB-S2,DTMB-T,DVB-T, DVB-T2,nQAM and etc., It has AGC function to maintain a constant power output of the transmitter to ensure the stable and reliable operation. It is the best way for point to point transmission with UHF band signal and also widely used omnidirectional coverage.

#### **Main features**

- The L Band 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: 1GHz-1.6GHz.
- Optional Output Power: 10W/20W/50W.
- 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.
- 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.

### **Technical Specifications**

Model	TY-2101B				
RF Output Frequency	cy 1000~1600MHz(frequency band carrier signal takes could be set				
Range	arbitrarily, or specified by user)				
Bandwidth	Maximum Bandwidth≤200MHz				
Modulation Mode	DVB-S,DVB-S2,DTMB-T,DVB-T,DVB-T2,nQAM				
RF Digital Output Power	10W				
Chauldon ratio	≥40 64QAM				
Shoulder ratio	≥25 QPSK				
RF Output Interface	50Ω N type connector				
	Return Loss: >20dB				
RF Frequency Response	BW: 200MHz				
	Passband Fluctuation: ≤2.0dB				
1 tooponoe	Any Within 10MHz:≤1.0dB				
Group Delay Characteristics	≤40nsec				
LO Frequency	2033MHz(or specified by customer)				
LO Phase Noise	N≤-100dBc/Hz@10KHz				
IF Input Level	-25~-10dBm				
IF Input Frequency	467~667MHz(*670~870MHz,fL: *1830MHz,*sepcified by user)				
IF Input Interface	75Ω/F connector				
	Return Loss: >15dB				
In-band Spur Restraint	-60dBc(relative digital signal level)				
Automatic Level Control	evel ≥20dB				
Environmental Working Temperature Range: -20°C~+45°C					

Conditions	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(Kg)	ackage Weigh(Kg) About 30kg	
Remote Control Remote administration and SMS alarm function(optional)		

## **TYE Series Transmitters**

Item	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