

# Technical Specification

## 1550 External Modulated Optical Transmitter

**JUNPU**  
骏 捷

JP15XXEST Series



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## 1.0 Product description

1550nm externally modulated optical transmitter is the core equipment in this system. RFTV is a unidirectional analogue and digital video broadcast. It adopts high efficiency modulation mode for RF carrier wave and its economy, flexibility and bandwidth validity is beyond comparison of IPTV. Adopting EPON or P2P access mode to realize triple-play, FTTx , RFTV broadcasting network in 1550nm optical transmitter wavelength still plays an important role.

## 2.0 Product feature

- ★ Both the external modulator and laser are imported from the United States or Japan.
- ★ Perfect pre-distortion circuit ensures the best CTB and CSO when the CNR is in high standard.
- ★ Perfect SBS suppress circuit and adjustable SBS in 13~19, suitable for different types of CATV net.
- ★ AGC control.
- ★ Internal double power which can be changed automatically.
- ★ Automatically shell temperature control.
- ★ Internal microprocessor software has the function of laser monitoring, parameter display, fault warning, net management and so on. Once the working parameter of the laser goes out of the fixed value of the software, the machine will warn.
- ★ The transmitter provides RJ45 and RS232 standard interface for the connecting the computer and monitoring.

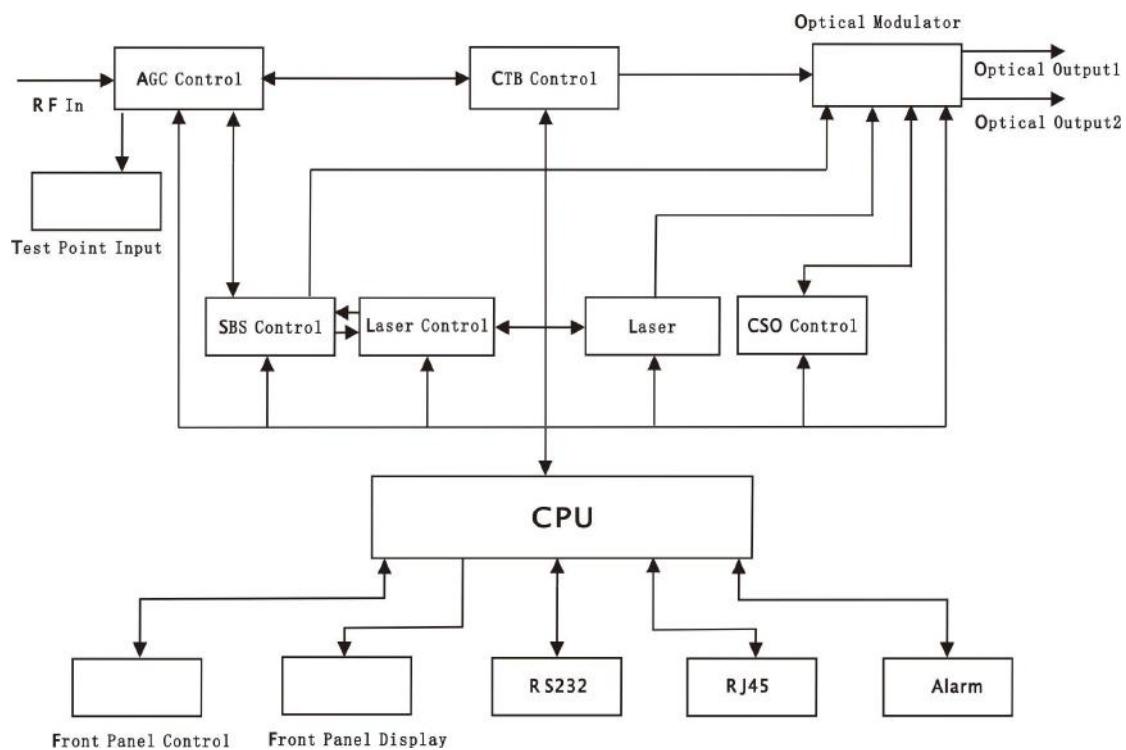
## 3.0 Main application

- Used in middle and small CATV center head end, solve the transmission of trunk and distributive network with high quality and low cost.
- Used in second-grade service area of sub-station. With excellent P/P ratio, provide second-grade users with high quality and high reliability value added service such as RFTV, IPTV, VOD and so on. It can avoid the limitation on transmission bandwidth and distance as well as system CSO deterioration caused by laser chirp for adopting 1550nm direction modulated optical transmitter.

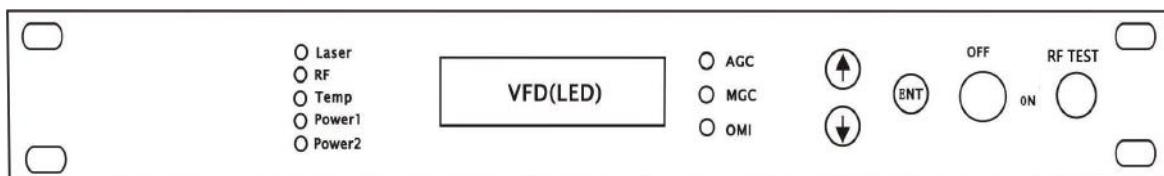
## 4.0 Technique index

Parameter		Index	Remarks
Optical Parameters	Wavelength (nm)	1550±10	
	Output power (dBm)	1×3 ~ 2×10	
	Optical return loss (dB)	≥60	
	Connector type	SC/APC	Or FC/APC
RF parameters	bandwidth (MHz)	47~862/1000	
	Input level (dBmV)	23±5	AGC
	Flatness (dB)	≤±0.75	45~862MHz
	Return loss (dB)	≥16	45~750MHz
	Input impedance (Ω)	75	
Link Parameters	channels	PAL-D/60ch	
	CNR (dB)	≥53	65Km fiber, Receive0dBm
	CTB (dB)	≥65	
	CSO (dB)	≥65	
	SBS (dBm)	13~19	Step 0.1
General Parameters	Net interface	RJ45, R232	
	Power (V)	90~265	Or -48VDC
	Power loss (W)	≤50	
	Working Temp (°C)	0~50	Automatically shell temp control
	Storage Temp (°C)	-20~85	
	Working relative Temp	20%~85%	

## 5.0 Optic/electrical schema



### 5.1 Front Panel



### Rear Panel

