

FUTV3503C ATSC-T Modulator



Outline

FUTV3503C ATSC-T modulator is FMUSER's newly designed product supporting ASI and SMPTE-310 input. After modulating the inputting signals through ATSC 8-VSB, it can output RF signals with the range between 40~960MHz. In other words, FUTV3503C ATSC-T modulator supports the coding and modulating mode under ATSC-T A/53 standard. It also supports adaptive non-linear and linear digital pre-distortion (DPD). Additionally, the system of this device can be on line controlled and upgraded through network, which can be widely used in ATSC-T digital broadcasting network setup and the testing for ATSC-T set top box design.

Features

- Full complying with ATSC A/53 standard
- Support ATSC 8VSB modulation
- Support 2ASI, 2 SMPTE 310M, 1 external 10Mhz reference clock and 1 RF input

- RF output frequency range: 40MHz~960MHz, 1Hz stepping
- Support RS coding, interleaving and Trellis coding
- Transmission bandwidth: 6MHz
- Supports adaptive linear digital pre-distortion (DPD)
- Supports adaptive non-linear digital pre-distortion (DPD)
- Adopts constant-temperature crystal oscillator, the frequency stability can be up to 0.1 PPM
- Excellent RF output performance: EVM, MER, SNR, shoulder level and etc.
- LCD/Keyboard and net management, support SNMP/NMS

Specifications

Input	2xASI input, hot backup	
	2xSMPTE 310M input, hot backup	
	1 channel 10MHz reference clock input	
	1 RF input for adaptive digital pre-distortion(DPD)	
Modulation	Standard	ATSC A/53
	Constellation	8VSB
	FEC	RS(208 188)+Trellis
RF output	Port	N Type, 50 impedance
	RF range	40~960Mhz, 1hz stepping
	Output Level	-26dbm~+3dbm, 0.1db stepping
	MER	42db
Non-linear DPD	over 10db ACPR improvement (normally)	
linear DPD	over 10db non-flatness adjustment(normally)	
System	LCD/keyboard, NMS/SNMP management	
	Chinese & English operation display	

	Software upgraded through network	
General	Demission(WxLxH)	482mm×455mm×44.5mm
	Weight	6.0kg
	Temperature	0~45 (operation),-20~80 (storage)
	Power Supply	AC 110V±10%,50/60Hz AC 220V±10%, 50/60Hz
	Consumption	25W

Principle chart

