COL5601 DVB-T2 modulator

Outline

COL5601 DVB-T2 modulator is our new product developed complying with the DVB-T2 standard. With its advanced modulating technology, this modulator can effectively make use of the ground spectrum resources and make it possible to provide reliable signals for fixed, mobile and portable devices. Compared with DVB-T, the channel capacity is increased by 30% under the similar carrier to noise ratio (CNR) threshold. COL5601 DVB-T2 modulator also supports single-PLP and multi-PLP (option) to receive T2-MI from DVB-T2 gateway through its ASI and IP port. (This function is also option.)

Moreover, this device can be upgraded and controlled through network system, which allows it to be widely used in setting up digital broadcasting network and provide good signals for scientific laboratory and DVB-T2 STB.

Features

- ✓ Fully complying with EN302 755 standard
- ✓ 4 ASI input ports (for 1 channel TS input with 3 ports for backup)
- ✓ T2-MI over IP input (Option)
- ✓ 10MHz input/loop out, 1PPS input/loop out
- ✓ DVB-T2 RF output
- ✓ Supports single PLP, multi-PLP (Option)
- ✓ Support MISO and SISO
- ✓ Support QPSK/16QAM/64QAM/256QAM (normal or rotated)
- ✓ Support TS format: T2-MI (Option) or TS (Mode A)
- ✓ High performance output: MER>43dB, shoulder level>56dB
- ✓ Output signal bandwidth: 5M, 6M, 7M, 8MHz
- ✓ Support MFN and SFN (Option) net mode
- ✓ Supports non-linear and linear digital pre-distortion (DPD) --->Video
- ✓ RF output level: -25~+3 dBm, 0.1db stepping
- ✓ Constant temperature crystal oscillator, as high as 0.1ppm stability

- ✓ Support online upgrade
- ✓ Keyboard operation and LCD display
- ✓ Web Network management system (GUI)

Specifications

Input	T2MI input over ASI and IP	
		100 Mbps Ethernet port ----COL5602
	1 channel TS input over ASI	
	10MHz reference clock input and loop out, BNC interface	
	1PPS input and loop out, BNC interface	
Modulation	Standard	EN302 755
	Mode	Mode A: single-PLP; Mode B: multiple-PLP (Option)
	PLP Constellation	QPSK, 16QAM, 64QAM, 256QAM (Normal or Rotated)
	L1 Post Constellations	BPSK, QPSK, 16QAM, 64QAM
	FEC Length	Short(16K), Normal (64K)
	FEC Rate	1/2, 3/5, 2/3, 3/4, 4/5, 5/6
	Pilot Pattern	PP1 - PP8
	Guard Interval	1/128, 1/32, 1/16, 19/256, 1/8, 19/128, 1/4
	FFT Mode	1k, 2k, 4k 8k, 16k, 32k (normal or extended)
	Bandwidth	5MHz, 6MHz, 7MHz, 8MHz
	Net Mode	MFN, SFN (Option)
RF Out	Connector	N Type, 50ΩImpedance
	RF range	30~999Mhz, 1hz stepping
	Output level ATT	-25~+3 dBm, 0.1db stepping
	MER	> 43db

	Shoulder Level	>56dB
System	LCD display, keyboard and web Network management	
	Supporting software upgrading through network	
General	Demission (W*L*H)	482mm×410mm×44mm
	Weight	4.8kg
	Temperature	0~45℃(operation),-20~80℃(storage)
	Power supply	AC 220V±10%,50/60Hz
	Power Consumption	34W

Principle chart