

IMM28i

28 in 1 ISDB-T Modulator



Product Overview

IMM28i 28 in 1 ISDB-T & 32 in 1 DVB-T & 48 in 1 DVB-C is the latest generational Mux-modulating device developed by VIDEOPTION. It supports maximum 128 IP input through the 3 GE/SFP ports and 2 GE ports, 32 IP input through the 10 FE ports, and also has 2 ASI inputs. After 28 & 32 & 48 multiplexing, it gives 28 ISDB-T & 32 DVB-T & 48 DVB-C non-adjacent carriers (50MHz~960MHz), 28 & 32 & 48 IP (MPTS) outputs as mirror of carriers. The device is characterized with high integrated level, high performance and low cost. This is very adaptable to newly generation DTV broadcasting system.

Key Features

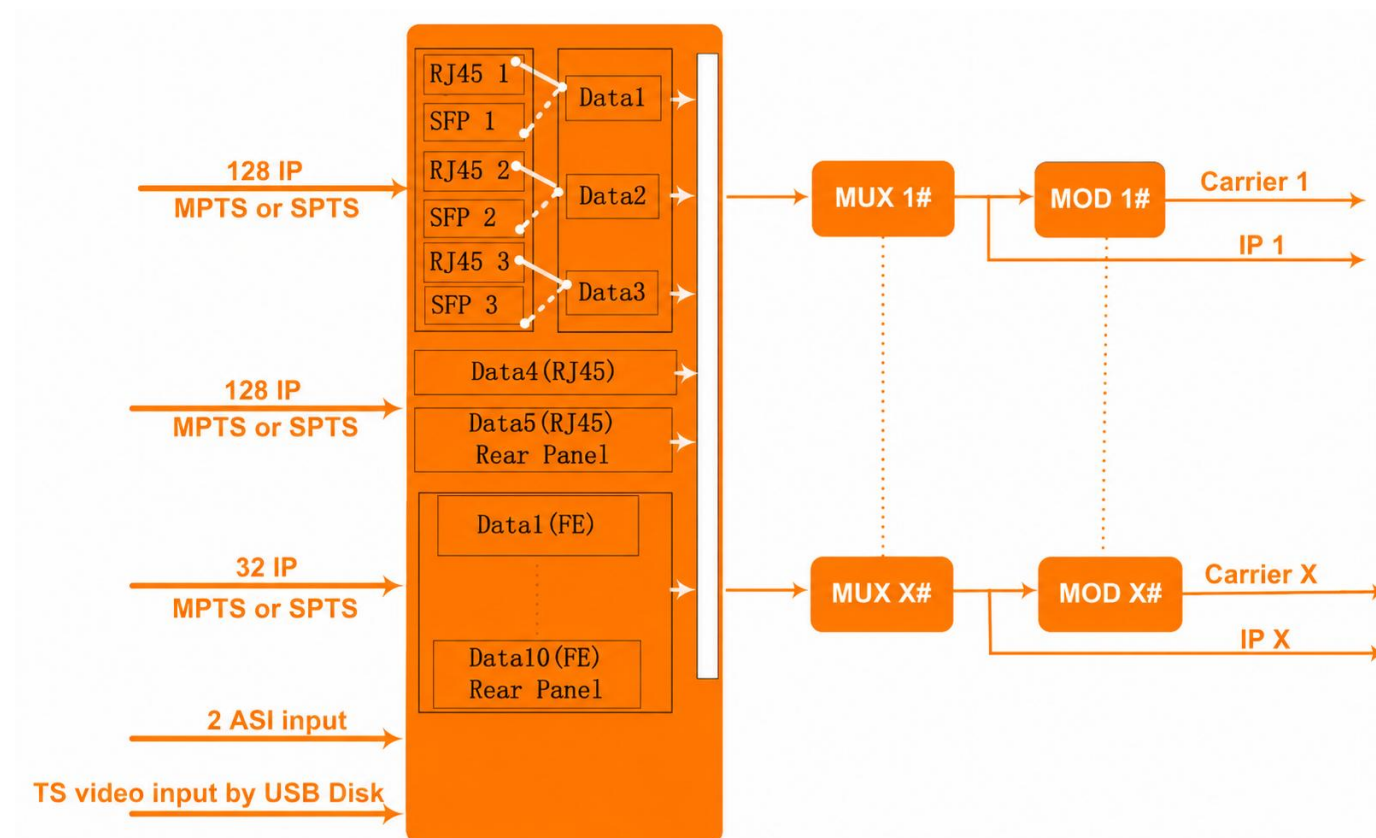
- 3 RJ45 /SFP GE ports (each port max 128 IP in):
Data1&2&3 ports only for input
- 2GE ports (each port max 128 IP in):

Data4 is input port

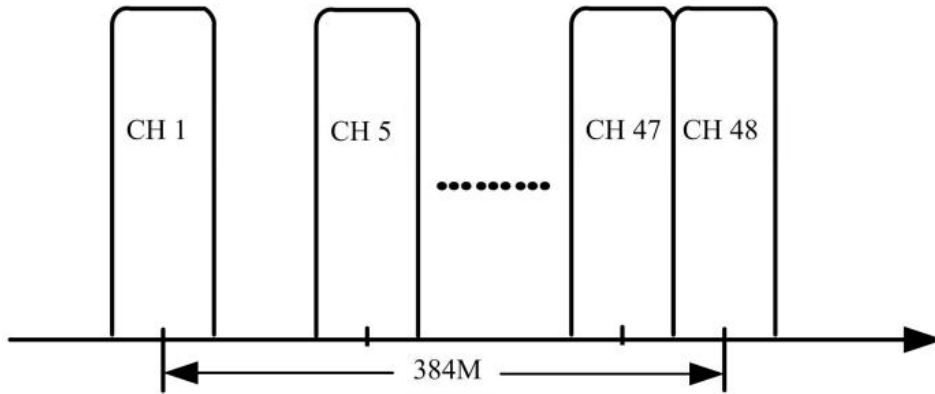
Data5 is bi-directional port, 28 & 32 & 48 IP out (as mirror of 28 ISDB-T & 32 DVB-T & 48 DVB-C out version)

- 10 FE ports (each port max 32 IP in):
Data1-Data10 all for input
- ISDB-T/DVB-T/DVB-C RF in one device, Modulation dynamic switching (only two modulation options can be chosen in device)
- Supports accurate PCR adjusting
- Max 840Mbps for each input
- Supports PID remapping and PSI/SI editing
- Supports up to 256 PIDs remapping per channel
- Supports 2 ASI input
- 1 USB Player (Insert the USB Flash drive with “xxx.ts” videos in IMM28i and play back the content in an easy way; file system FAT 32)
- 28 & 32 & 48 multiplexed TS over UDP/RTP output
- 28 ISDB-T/32 DVB-T/48 DVB-C non-adjacent carriers output, compliant to ARIB STD-B31 standard/ETSI EN300 744 standard/DVB-C (EN 300 429) and ITU-T J.83 A/B/C
- Web-based Network management

Inner Principle Chart:



Carrier Setting Illustration



Specifications

Input	Input	28 ISDB-T & 32 DVB-T & 48 DVB-C carriers: Max 128 IP input through Data1-Data5, 100/1000M Ethernet Port (Data1-Data3 are SFP interface optional). Each Data port can input max 128 IP. Max 32 IP input through Data1-Data10 (FE port, Rear panel), 100M Ethernet Port, Each Data port can input max 32 IP.
		2 ASI input, BNC interface
		1 USB Player input for re-mux ("xxx.ts" video)
	Transport Protocol	TS over UDP/RTP, unicast and multicast, IGMP V2/V3
	Transmission Rate	Max 840Mbps for each input channel
Mux	Input Channel	128 (or 32)
	Output Channel	28 (ISDB-T) or 32 (DVB-T) or 48 (DVB-C)
	Max PIDs	256 per channel
	Functions	PID remapping (auto/manually optional)
		PCR accurate adjusting
		PSI/SI table automatically generating
Modulation Parameters (ISDB-T)	Channel	16/20/24/28 (License gradable)
	Modulation Standard	ARIB STD-B31
	Constellation	QPSK, 16QAM, 64QAM
	Bandwidth	6MHz
	Transmission Mode	2K/4K/8K

	Code rate	1/2, 2/3, 3/4, 5/6, 7/8	
RF Output (ISDB-T)	Interface	F type output port for 28 non-adjacent carriers	
	RF Range	50~960MHz, 1kHz stepping	
	Output Level	-20dBm~1dBm(87~108dbμV), 0.1dB stepping	
	MER	≥ 40dB	
	ACL	-50 dBc	
Modulation Parameters (DVB-T)	Channel	16/20/24/28/32 (License gradable)	
	Modulation Standard	ETSI EN300 744	
	Constellation	QPSK/16QAM/64QAM	
	Bandwidth	6/7/8 MHz	
	Transmission Mode	2K/4K/8K	
	Code rate	1/2, 2/3, 3/4, 5/6, 7/8	
RF Output (DVB-T)	Interface	F type output port for 32 non-adjacent carriers	
	RF Range	50~960MHz, 1kHz stepping	
	Output Level	-20dBm~0dBm(87~107dbμV), 0.1dB stepping	
	MER	≥ 40dB	
	ACL	-55 dBc	
Modulation Parameters (DVB-C)	Constellation	J.83A	Constellation:16/32/64/128/256QAM
			Bandwidth:8M
		J.83B/C	Constellation:64/256QAM
			Bandwidth:6M
	QAM Channel	32/36/40/44/48 (License gradable)	
	Symbol Rate	5.0~7.0Msps, 1ksps stepping. 5057Ksps (J.83B, 64QAM) ; 5361Ksps (J.83B, 256QAM)	
RF Output (DVB-C)	Interface	F type output port for 48 non-adjacent carriers	
	RF Range	50~960MHz, 1kHz stepping	
	Output Level	-20dBm~-3dBm(87~104dbμV), 0.1dB stepping	
	MER	≥ 40dB	
	ACL	50~960MHz, 1kHz stepping	
TS output	28 & 32 & 48 IP output over UDP/RTP, unicast/multicast, Data1 100/1000M Ethernet Ports		

System	Web-based Network management	
General	Dimensions	420mm×440mm×44.5mm (WxLxH)
	Temperature	0~45°C (operation), -20~80°C (storage)
	Power Supply	AC 100V±10%, 50/60Hz or AC 220V±10%,50/60Hz