

MultiMOD

DIBVISION | DIBSYS

IP to RF Modulator with 3GE/SFP+2GE+10FE DATA ports

DVB-C CABLE DVB-T TERRESTRIAL ISDB-T



MultiMOD IP to RF Gateway and Modulator is an ideal solution for environments where you have a large number of displays over almost any distance such as Small and Medium Scale of Digital TV broadcasting System, Hotel, stadiums, Campus, entertainment facilities, Education Markets in limited budget. It supports maximum 128 IP input through the 3 GE/SFP port and 2 GE ports, 32 IP input through the 10 FE port, and also has 2 ASI input.

With IP source inputs and Multi-Modulated Carrier RF outputs Simultaneously 28 in 1 ISDB-T, 32 in 1 DVB-T, or 48 in 1 DVB-C, MultiMOD all-in-one device designed especially for high channel density Distribution Video Engineering project where rapid deployment, compatibility IP source inputs and Multi-Modulated Carrier RF outputs.

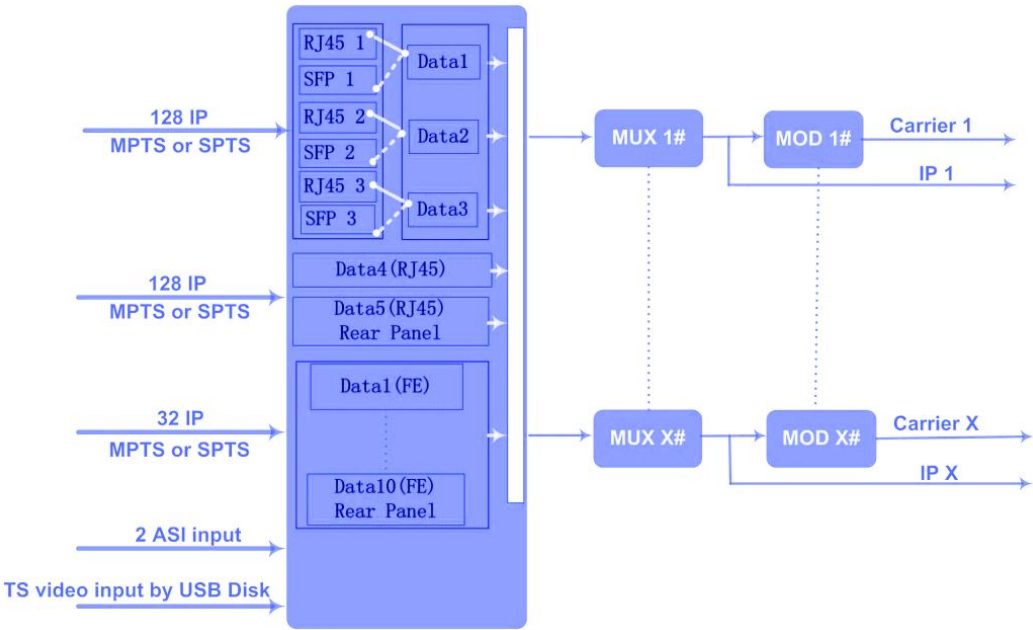
Features

- 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 ports
- Data5 is bi-directional ports, 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 on device)
- Supports accurate PCR adjusting
- Max 840Mbps for each input
- Supports PID remapping and PSI/SI editing, PIDs remapping per channel
- Supports up to 256 pids per channel
- Supports 2*ASI input
- Support 1*USB Player (file system FAT 32)
- Support 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
- Support Web-based Network management

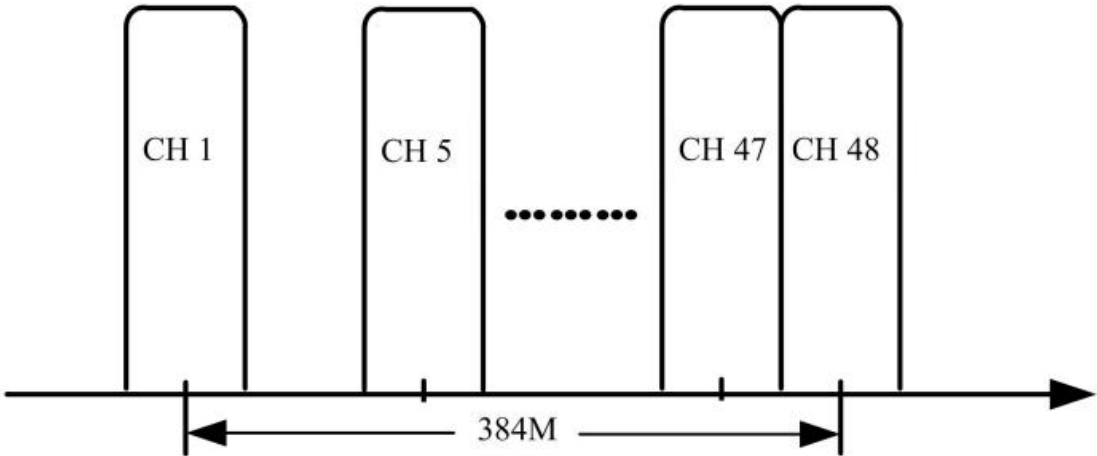
Main Application

- Distribute IP source to All TVs Over Existing TV Coax
- Advertising, monitoring, training and educating
- Upgrade all your analog Head-ends to digital TV Solution
- Enterprise, Hotel, campus, hospital, Public Place
- Works with Digital TV transmitter in wireless TV broadcasting
- Low cost Digital TV distribution
- DTMB project in Southeast Asian countries

Principle Chart



Carrier Setting Illustration



TECHNICAL SPECIFICATIONS

Input

	28*ISDB-T/ 32*DVB-T/ 48*DVB-C carriers: Max 128*IP input through Date1 ~ Date5, 100/1000M Ethernet Port (Date1 ~ Date3 are SFP interface optional). Each Data port can input max 128*IP.
ASI	2*ASI input, BNC interface
USB	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

ISDB-T Modulation

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

ISDB-T RF OUTPUT

Interface	F typed 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

DVB-T Modulation

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

DVB-T RF OUTPUT

Interface	F typed 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

DVB-C Modulation

Channel	32/36/40/44/48(License gradable)
Constellation	J.83A:16/32/64/128/256QAM J.83B/C:64/256QAM
Bandwidth	J.83A:8M J.83B/C:6M
Symbol Rate	5.0~7.0Msps, 1ksps stepping. 5057Ksps (J.83B, 64QAM) ; 5361Ksps (J.83B, 256QAM)

DVB-C RF OUTPUT

Interface	F typed 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

IP	28/32/48 IP output over UDP/RTP, unicast/multicast, Data5 100/1000M Ethernet Ports
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System

Management	Web-based Network management
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General

Size	420mm×440mm×44.5mm (W*L*H)
Temperature	0~45℃ (operation), -20~80℃ (storage)
Power Supply	AC100V±10%, 50/60Hz or AC 220V±10%,50/60Hz

Ordering Information

Modulation	Carrier number(Increase every four carriers by license)				
DVB-C	32	36	40	44	48
DVB-T	16	20	24	28	32
ISDB-T	16	20	24	28	/
Note:	Different combination of carrier number can be selected,Need to be confirmed before an order				