



# IP MUX Scrambling QAM Modulator



## Product Overview

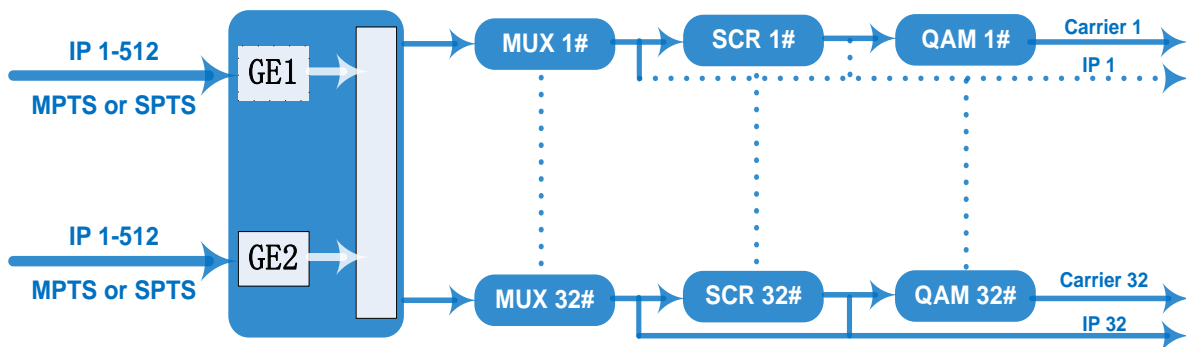
IP Mux-Scrambling modulator is the latest generational Mux-scrambling-modulating all-in-one device developed by DEXIN. It has 32 multiplexing channels, 32 scrambling channels and 32 QAM (DVB-C) modulating channels, and supports maximum 1024 IP input through the GE port and 32 non-adjacent carriers (50MHz~960MHz) output through the RF output interface. The device is also characterized with high integrated level, high performance and low cost. This is very adaptable to newly generation CATV broadcasting system.

## Key Features

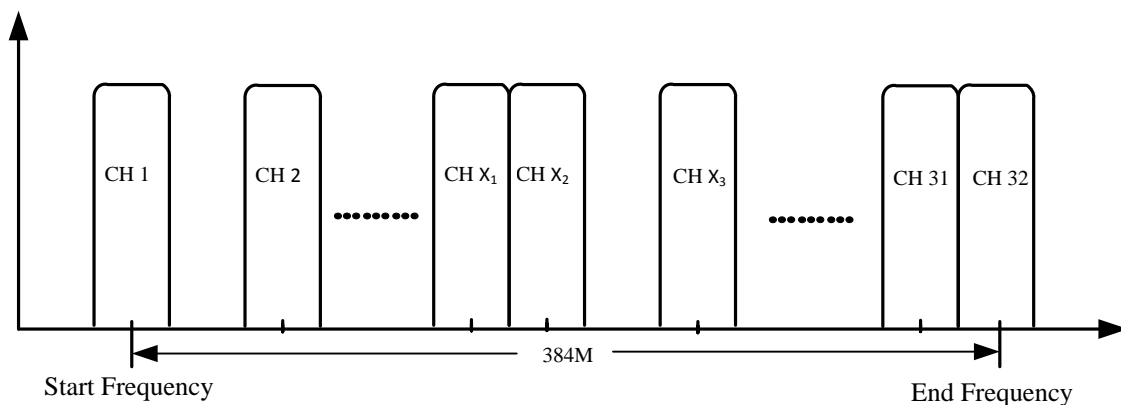
- 2 GE input, SFP interface
- Supports up to 1024 channels TS over UDP/RTP, unicast and multicast, IGMP v2/v3
- Max 840Mbps for each GE input
- Supports accurate PCR adjusting

- Supports CA PID filtering, remapping and PSI/SI editing
- Supports up to 180 PIDS remapping per channel
- Support DVB general scrambling system (ETR289), simulcrypt standards ETSI 101 197 and ETSI 103 197
- Support 32 multiplexed or scrambled TS over UDP/RTP/RTSP output
- 32 non-adjacent QAM carriers output, compliant to DVB-C (EN 300 429) and ITU-T J.83 A/B
- Supports RS (204,188) encoding
- Support Web-based Network management

### Inner Principle Chart



### Carrier Setting Illustration



### Specifications

<b>Input</b>	Input	512×2 IP input, 2*100/1000M Ethernet Port (SFP)
	Transport Protocol	TS over UDP/RTP, unicast and multicast, IGMP V2/V3
	Transmission Rate	Max 840Mbps for each GE input
<b>Mux</b>	Input Channel	1024
	Output Channel	16
	Max PIDs	180 per channel
	Functions	PID remapping(auto/manually optional) PCR accurate adjusting PSI/SI table automatically generating
<b>Scrambling Parameters</b>	Max simulcrypt CA	4
	Scramble Standard	ETR289, ETSI 101 197, ETSI 103 197
	Connection	Local/remote connection
<b>Modulation Parameters</b>	QAM Channel	32 non-adjacent carrier
	Modulation Standard	EN300 429/ITU-T J.83A/B
	Symbol Rate	5.0~7.0Msps, 1ksps stepping
	Constellation	16, 32, 64 , 128, 256QAM
	FEC	RS (204, 188)
<b>RF Output</b>	Interface	1 F typed output port for 32 carriers, 75Ω
	RF Range	50~960MHz, 1kHz stepping
	Output Level	-20dBm~+10dBm(87~117dbμV), 0.1dB stepping
	MER	≥ 40dB
	ACLR	-60 dBc
<b>TS output</b>	32 IP output over UDP/RTP/RTSP, unicast/multicast, 2*100/1000M Ethernet Ports (SFP)	
<b>System</b>	Network management software (NMS) supporting	
<b>General</b>	Demission	420mm×440mm×44.5mm (W×L×H)
	Weight	3kg
	Temperature	0~45°C(operation), -20~80°C(storage)
	Power Supply	AC 100V±10%, 50/60Hz or AC 220V±10%, 50/60Hz
	Consumption	15.4W

### System Connection Sample (IP Based)

