



**DHP200E** 

**10G IP QAM Processor** 



#### **Product Overview**

DHP200E 10G IP QAM processor is an all-in-one device developed by DEXIN which integrates multiplexer, scrambler and modulator in one body with maximum 192 DVB-C QAM channels output. With 10G switch built in, it can process 10G optical signals to work as a traditional QAM modulator.

This processor is equipped with 3 card slots to load 32ch or 48ch or 64ch QAM card. Its high density helps operators to save cost to the most extent.

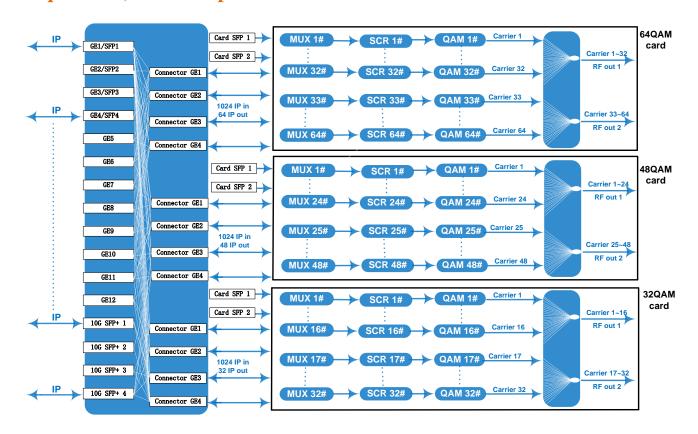
#### **Key Features**

• Support 4 SFP+ (10G)/4 SFP(1G) ports and 12 GE ports input & output from the front panel, SFP port 1-4 and GE port 1-4 are in the same working group (choose one to use from the corresponding SFP port and GE port) and 2 SFP ports input(optional) per daughter card (32/48/64 QAM)

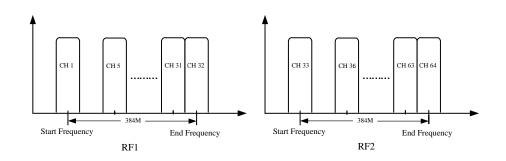


- High density, modularized plug-in design, 1U chassis with max 3 QAM cards
- Support multiplexer and scrambler with max 6 CAS Simultaneous Encryption
- Maximum 192 non-adjacent QAM carriers output
- Flexible combination of 32QAM/48QAM/64QAM card
- Supports accurate PCR adjusting/CA filtering, PID remapping and PSI/SI editing
- Input Port/IP Backup function
- Web-based Network management
- 1\*220VAC or 2\*220VAC not hot-swapping PSU option

# Inner Principle Chart (Example: one 64qam card + one 48qam card + one 32qam card) with SFP ports in card



#### **Carrier Setting Illustration (Example: 64qam card)**





## **Specifications**

Input	IP Input	Max 1024	Max 1024 IP inputs per card through 4 SFP+, 4 SFP and 12		
		GE ports in the front panel and 2 SFP ports in the card itself			
	Transmission Rate	Max 9600Mbps for each 10G SFP+ input/Max 960Mbps for			
		each GE	each GE and SFP input		
	Transport Protocol	TS over UDP/RTP, unicast and multicast, IGMP V2/V3			
Mux	Max PIDs Remapping	256 per output channel			
	Functions	PID remapping (auto/manually optional)			
		PCR accurate adjusting			
		PSI/SI table automatically generating			
Scrambling	Max simulcrypt CA	6			
	Scramble Standard	ETR289, ETSI 101 197, ETSI 103 197			
	Connection	Local/remote connection			
	Modulation Standard	EN300 429	EN300 429/ITU-T J.83A/B/C		
	Constellation	1 02 4	Constellation :16/32/64/128/256QAM		
		J.83A	Bandwidth :8M		
		J.83B/C	Constellation :64/256QAM		
		J.83B/C	Bandwidth :6M		
Modulation	QAM Channel	32/48/64/8	32/48/64/80/96/112/128/144/160/176/192 non-adjacent		
Modulation		carriers output,			
		384Mbps bandwidth for each RF port			
	Symbol Rate	3600~7200Ksps, 1ksps stepping			
		5057Ksps (J.83B, 64QAM) ; 5361Ksps (J.83B, 256QAM)			
	Constellation	16, 32, 64, 128, 256QAM			
	FEC	RS (204, 188)			
RF Output	Interface (per card)	2 F type output ports for $32/48/64$ carriers card, $75\Omega$ .			
		32ch/48ch/64ch qam card : Carrier 1~16/1~24/1~32 out thru			
		RF1, 17~32/25~48/33~64 thru RF2			
	RF Range	50~960MI	50~960MHz, 1kHz stepping		
	Output Level	-20dBm~+10dBm(87~117db μV), 0.1dB stepping			
	MER	≥ 40dB			
TS output	Per Daughter QAM Card	32/48/64 II	32/48/64 IP output over UDP/RTP/RTSP, unicast/multicast,		
		through 4 SFP+ ports, 4 SFP ports and 12 GE ports in the			
		front panel			
System	Web-based Network manag		ment		
General	Dimension	480mm×440mm×44.5mm (WxLxH)			
	Temperature	$0\sim45^{\circ}$ C (operation), $-20\sim80^{\circ}$ C (storage)			
	Power Supply	AC 100V±10%, 50/60Hz; or AC 220V±10%, 50/60Hz			
	Consumption	About 200W (3 daughter QAM cards)			



## **Major Technical Comparison**

	DHP200D	DHP200E
Card Number	Max 2	Max 3
SFP+/SFP/RJ45 ports in the	3 SFP+(10G)/SFP(1G) ports and 2	4 SFP+ (10G)/4 SFP(1G) ports
front panel	GE ports	and 12 GE ports
Max Carriers number	112	192
Inner connector GE ports	6	12
DATA Port in card	Danands on gard spage	2 SFP ports as input per card
DATA FOR III Caru	Depends on card spec	(optional)

### **Order Guide**

• Card Type Option: 32, 48 or 64 QAM card

• Card Number Option: 1, 2 or 3 pcs

• SFP ports option in card: With or Without

• PSU option: 1\*220VAC or 2\*220VAC not hot-swapping PSU