

# Specification



## IP to 16 QAM Modulator

### ACE 16IPQAM

SKU : AD0111BBA1001

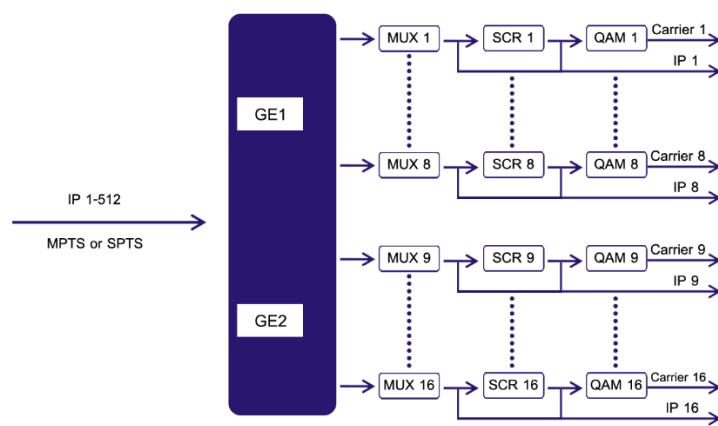


The **ACE 16IPQAM** is the latest generational Mux-scrambling-modulating all-in-one device developed. It has 16 multiplexing channels, 16 scrambling channels and supports maximum 512 IP input through the GE port and 16 non-adjacent carriers (50MHz~960MHz) output through the RF output interface. The device is also characterized with high integrated level, high performance and low cost. This is very adaptable to newly generation CATV broadcasting system.

#### Main Features:

- Modular design, 1U chassis supports up to 3 modules
- Fully complying with EN300 429/ITU-T J.83A
- 2 GE ports support backup input, up to 512 IP inputs, network de-bounce
- Supporting UDP protocol, uni-cast and multicast, IGMP V2/V3
- Single input IP max value 108Mbps, amount input coding stream value 840Mbps
- Direct-connection input or be multiplexed to 8 output channels
- Any input channel to any output channel multiplexing, amount of output PID per input is 256 (maximum)
- PCR fine-tuning
- PSI / SI editing and inserting
- 16 QAM modulation carrier output, 4 adjacent channel carrier output, 2 RF output
- Symbol rate range: 5.0Msps~7.0Msps
- RF output range: 48MHz~860MHz in 1kHz step
- RF output level attenuation: -14dBm~6dBm in 0.5dB step
- MER≥40dB
- Network management system

#### Principle Chart:



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## Specifications:

PRODUCT	ACE 16IPQAM	
Input	512×2 IP input, 2 100/1000M Ethernet Port (SFP)	
Transport protocol	TS over UDP/RTP, unicast and multicast, IGMP V2/V3	
Transmission code	Max 840Mbps amount channels	
Mux	Input channel	512
	Output channel	16
	Maximum PIDs	180 per input channel
	Functions	PID re-mapping( auto/manual optional)
	PCR accurate adjusting	PSI/SI table automatically generating
Scrambling	Max simulcrypt CA	4
Parameters	Scramble Standard	ETR289, ETSI 101 197, ETSI 103 197
	Connection	Local/remote connection
	QAM Channel	16 non-adjacent carrier
Modulation	Modulation Standard	EN300 429/ITU-T J.83A/B
Parameters	Symbol Rate	5.0~7.0Msps, 1ksps stepping
	Constellation	16, 32, 64 , 128, 256QAM
	FEC	RS (204, 188)
RF output	Interface	1 F typed output port for 16 carriers, 75Ω impedance
	RF range	50~960MHz, 1kHz stepping
	Output ATT	-20dBm~+10dBm(87~117dbμV), 0.1dB stepping
	MER	≥ 40dB
	ACLR	-60 dBc
TS output	16 IP output over UDP/RTP/RTSP, unicast/multicast, 2 100/1000M Ethernet Ports	
System	Network management software (NMS) supporting	
General	Demission(WxLxH)	420mm×440mm×44.5mm (WxLxH)
	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

