

# 4IN1 IP QAM Modulator with MUX-Scrambler



## Overview

4IN1 IP QAM Modulator with MUX-Scrambler supports 32xIP input and 4xRF output. The input IP signal can be sent to signal processor and be converted to TS (transport stream). It integrates multiplexer, scrambler and QAM/DVB-C modulator. It supports 4 CAS/SMS SimulCrypt. It suits 1U rack and can be configured by front panel LCD and NMS (network management software). Its high-integrated and cost-effective design makes it widely used in varieties of digital broadcasting distribution systems.

## Features

- ◆ Integrated mux-scrambler modulator
- ◆ 32xIP input
- ◆ 4xDVB-C RF output
- ◆ Support 4xCAS/SMS
- ◆ 8M cache, anti-burst stream
- ◆ PID filter and re-mapping
- ◆ PSI/SI edit, NIT table inserts and PCR correction

- ◆ LCD/Keyboard control by front panel and network management by Ethernet

## Technical Specifications

<b>Input</b>	<b>IP</b>	1000mbps IP port (32×IP in)
<b>Output</b>	<b>Interface</b>	4×RF, F-head
	<b>Impedance</b>	75Ω
	<b>Constellation</b>	16, 32, 64, 128, 256 QAM
	<b>Symbol Rate</b>	5~9 Msps, 1Ksps step
	<b>Error-Correcting Codes</b>	RS code188/204
	<b>MER</b>	≥40dB
	<b>BER</b>	0
	<b>Output Level</b>	85~105dBV
	<b>Level Test Port</b>	65~85dBV
	<b>Level Attenuation Range</b>	-20dBm~0dBm (per carrier), 0.5dB step
	<b>Frequency Range</b>	47MHz~870MHz
<b>Multiplexer</b>		from the input 32×IP
<b>Scrambler</b>		support 4×CAS/SMS; head-end implementation of DVB simulcrypt (ETSI TS 103 197 V1.4.1)
<b>Management</b>		network RJ-45, 10/100M Keyboard+LCD
<b>General Features</b>	<b>Size</b>	482mm×280mm×44mm
	<b>Temperature Range</b>	0~45°C (Operation); -20~80°C (Storage)
	<b>Power</b>	100-240VAC, 50Hz, 25W