

## DT-QAM-12-SD

### 12 Source SD RCA to QAM Encoder Modulator

The DataTronix 12-Source SD RCA to QAM Encoder Modulator is a professional video distribution device that converts multiple standard-definition video sources into digital television channels for delivery over a coaxial cable network. By combining video encoding and RF modulation in one unit, it enables efficient distribution of multiple programs to TVs with integrated QAM tuners.

The unit accepts up to twelve composite RCA video inputs with stereo audio, supporting sources such as media players, security cameras, satellite receivers, and digital signage systems. Each input is encoded using MPEG-2 video compression and multiplexed into four configurable QAM RF channels for distribution over a coaxial infrastructure.

Housed in a compact 1RU rack-mount chassis, the encoder modulator is designed for easy installation in environments such as hotels, healthcare facilities, campuses, and digital signage networks. A web-based management interface allows users to configure channels, RF frequencies, and system settings from any connected computer.

This solution is ideal for installations that require standard-definition distribution, including systems supporting legacy televisions or environments where HD distribution is limited by licensing or bandwidth constraints.

#### Key Features

- **12 RCA composite video inputs** with stereo audio
- Converts **12 SD video sources into 4 digital QAM channels**
- **MPEG-2 video encoding** optimized for standard-definition sources
- Supports **MPEG-1, AAC-LC, HE-AAC, and AC-3 audio formats**
- **RF output frequency range:** 54–864 MHz
- Supports **64-QAM and 256-QAM** modulation
- **Web-based configuration and monitoring** interface
- **High-power RF output:** 50+ dBmV
- **Typical MER levels:** 38+ dB
- **Standard 1RU rack-mount chassis** for easy installation



#### Input

Input Connector (Rear panel)	12 x RCA
Video Encoding	MPEG 2
Video Input Resolution	720 x 576p; 720 x 576i 640 x 480p; 640 x 480i
Video Bit Rate	5000 - 19000 Kbps
Audio Encoding	MPEG 1 Lay II, AAC-LC, HE-AAC, AC3
Audio Sample Rate	32 / 44.1 / 48 KHz

#### Output

Output Connector	1 x RF Female @75Ω
Output Range	54-864 MHz
Output Frequency	4 Agile Channels
Output Level	≥45dBmV
MER	Typical 38dB
<b>DVB-C J.83B</b>	
Bandwidth	6M, 7M, 8M
Constellation	64 QAM, 256 QAM
Symbol rate	Symbol Rate Automatically

#### TS Processing

Advanced PSI/SI Regeneration	Yes
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#### General

Input voltage	90 - 264VAC, DC12V 5A
Power Consumption	Less than 49.1W
Rack Space	1RU
Weight	5.64 lbs (2.56 kg)
Dimensions	18.97 x 1.73x 10.23" (482 x 44 x 260 mm)
Warranty	2-Year Limited Warranty