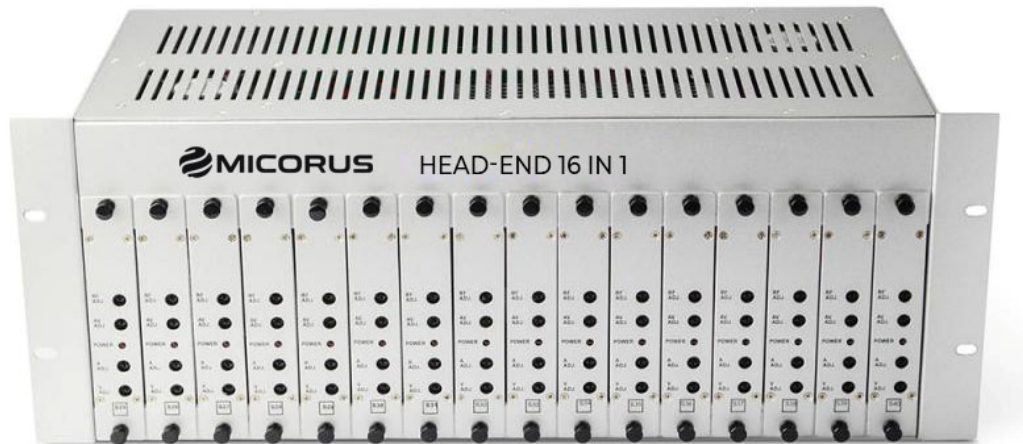


ANALOGUE CHANNEL MODULATOR

MC-A4100MD-16PAV

Professional 16-in-1 Analogue Channel Modulator for Hotel Cable TV Systems



Professional Product Overview

Professional 16-in-1 analogue channel modulator system for hotel cable TV and commercial MATV networks. The chassis accommodates up to 16 microprocessor-controlled fixed mini modulators with integrated active combining, stable RF output and simplified installation.

16 Modulators
 Fixed mini-card capacity

42 dBmV
 High chassis output level

45–860 MHz
 RF operating range

SAW Filtering
 Clean in-band C/N

16-in-1 analogue RF headend solution for hotel and commercial cable TV distribution

DESCRIPTION & KEY FEATURES



DESCRIPTION

The MC-A4100MD-16PAV is a professional 4RU analogue channel modulation system designed for hotel cable TV, MATV and commercial RF distribution networks. The chassis accommodates up to 16 microprocessor-controlled fixed mini modulator cards, allowing multiple AV sources to be converted into stable analogue RF channels within one central headend platform.

The integrated active combiner reduces unnecessary external cabling and minimises connection complexity, while delivering a high-level chassis RF output for reliable distribution. Each modulator card is configured for its required channel assignment and frequency offset, supporting stable operation and simplified installation.

With SAW filtering, regulated power architecture, front-panel access and dual cooling fans, the system is engineered for continuous commercial use in hospitality and building TV distribution environments where analogue RF delivery remains required.

01 16-in-1 Analogue Modulation Rack-mounted chassis supports up to 16 fixed mini modulator cards for centralised analogue TV channel distribution.	02 Integrated Active Combiner Built-in active RF combining reduces external cabling and eliminates the need for a separate combiner.
03 Stable High-Level RF Output Chassis RF output supports 105 dB μ V adjustable level with -20 dB test point for convenient measurement.	04 SAW Filter Performance SAW filtering at the IF stage supports strong in-band carrier-to-noise performance and clean channel output.
05 Reliable Cooling & Power Switching power supply and dual cooling fans support stable long-term operation in rack-mounted installations.	06 Front-Panel Service Access Front-panel access allows convenient adjustment, service handling and operational checks.

Application Note

Designed for hotel and commercial CATV systems where multiple AV programme sources must be centrally converted into analogue RF channels and distributed across existing coaxial networks.

Technical Specifications

CHASSIS - RF

Frequency Range	45-860 MHz
Output Connector	F Connector
Output Level	105 dBμV (adjustable)
Test Point	-20 dB
Isolation Port to Port	≥35 dB
Return Loss	≥12 dB
Gain	+8 dB

CHASSIS - GENERAL

Modulator Capacity	16
Input Voltage Range	110V or 220V
Cooling Fan	2
Power Consumption	57W (fully loaded)
Dimension	42 x 17 x 20 cm
Net Weight	10 kg (fully loaded)
Shipping Weight	3.7 kg (chassis only); 11 kg (fully loaded)
Carton Size	53 x 30 x 24 cm

Modulator Card Specifications

MODULATOR CARD - RF

Output Frequency	45-860 MHz
Output Level	113 dBμV (adjustable)
Output Connector	F Connector
A/V Ratio	-11 to -18 dB (adjustable)
Frequency Stability	±5 kHz

MODULATOR CARD - VIDEO / AUDIO INPUT

Video Input Level	0.6-1.5 Vp-p (87.5% modulation)
Video Input Connector	Yellow RCA
Audio Input Level	1 Vp-p (25 kHz deviation)
Audio Input Connector	White RCA

MODULATOR CARD - GENERAL

Voltage	DC 5V
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