MICORUS

UK
TECHNOLOGY

RF DISTRIBUTION AMPLIFIER

MC-SAMP-41DB

High Output Distribution Amplifier with Active Return Path and 85–1006 MHz Range

Professional Product Overview
High-output coaxial distribution amplifier designed for CATV, MATV and multi-dwelling RF networks. The unit provides 41 dB forward gain, active return-path capability, IP65 protection and precise rotary adjustment for reliable in-building signal distribution.

41 dB Gain Forward path amplification	**85–1006 MHz** Downstream frequency range
32/26 dB Return Return path gain @ 60 MHz	**0–15 dB Control** Attenuation & equalisation

High-output house amplifier with active return path for professional CATV and MATV distribution networks

Description & Key Features

DESCRIPTION

The MC-SAMP-41DB is a professional coaxial house amplifier developed for small and medium CATV, MATV and apartment distribution networks. It is designed to reinforce RF signal levels across in-building coaxial infrastructure while maintaining low-noise performance and stable channel quality.

With 41 dB forward gain, selectable interstage gain settings and active return-path capability, the unit can be configured as a line extender or cascade amplifier for trunk-position distribution applications.

The one-board architecture, rotary 1 dB adjustment controls, integrated cable simulator, IP65 Class II housing and zinc diecast construction provide a robust and efficient solution for professional in-building RF distribution.

01 High-Output RF Amplification Designed for stable CATV and MATV distribution in multi-dwelling premises and compact RF networks.	02 41 dB Forward Gain Provides 41 dB forward gain with selectable interstage gain for line extender or cascade operation.
03 Active Return Path Supports upstream operation with return-path mode selection: active, passive or off.	04 Precise Signal Control Rotary switches provide 1 dB step adjustment for attenuation and equalisation settings.
05 Robust 1 GHz Platform State-of-the-art 1 GHz technology with integrated cable simulator and stable amplifier characteristics.	06 Protected Installation IP65 Class II zinc diecast housing with extensive ESD and surge protection for reliable service.

Application Note

A high-output distribution amplifier for residential buildings, small hotels, apartments and local MATV/CATV networks requiring reliable downstream amplification with active return-path support.

Technical Specifications

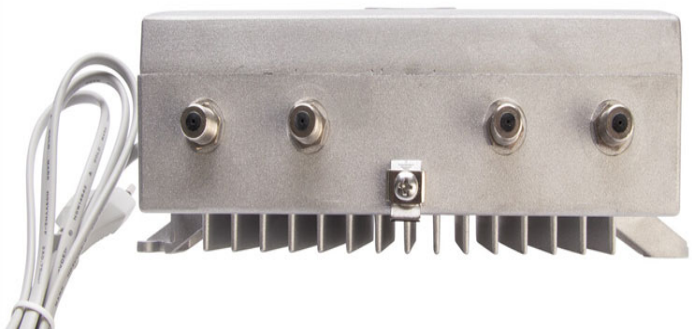
CHARACTERISTICS	
Output Level CSO @ 60 dB IMD (42 ch), flat	114 / 116 dBµV
Output Level CTB @ 60 dB IMD (42 ch), flat	113 / 115 dBµV
Output Level Return Path	120 dBµV

FREQUENCY RANGE	
Frequency Range	85–1006 MHz
Frequency Response	±1.0 dB

GAIN & RETURN PATH	
Gain Forward / Interstage	41 / 33 dB
Gain Return @ 60 MHz	32 / 26 dB
Slope - Interstage	DS 0 / 3 / 7 / 10 dB, US 0 / 3 / 6 / 9 dB
Return Path Mode	Active / Passive / Off

ADJUSTMENT & ELECTRICAL	
Attenuation / Equalisation Control	0–15 dB, 1 dB steps by rotary switches
Integrated Cable Simulator	Yes
Power Supply	Mains fed via Euro-plug
Protection	Extensive ESD and surge protection

Technical Specifications

OPERATIONAL & CONNECTORS	
Housing Protection Class	IP65
Insulation Class	Class II
Input Connector	Not specified in source data
Number of Outputs	1
Output Connector	Not specified in source data
RF Test Point Input	-20 dB, bi-directional
RF Test Point Output	-20 dB, directional

MECHANICAL & PACKAGING	
Product Dimensions	180(W) x 145(H) x 70(D) mm
Colour / Material	Silver, zinc diecast
Net Weight	1.600 kg
Total Weight	1.750 kg
Tara Weight	0.150 kg
Packaging Dimensions	0.078(D) x 0.240(H) x 0.170(W) m
Packaging Volume / TB(D)	0.003 m³ / 1.4 kg