

VOKON

Antenna Amplifier

VM-S120C



Product Overview

VM-S120C is a professional wideband antenna distribution system tailored for UHF wireless microphone systems, covering 450–950 MHz frequency range. It features adjustable antenna gain from -16 dB to +16 dB, ultra-low noise figure below 0.6 dB and high linearity performance to minimize intermodulation interference.

With 50Ω standard impedance, high isolation over 25 dB and VSWR less than 2, it ensures stable and clean signal transmission. Supporting 2–4 wireless microphone systems to share one antenna pair, it simplifies on-site installation. Equipped with 4 groups of 12V DC output and real-time voltage display, it delivers reliable, long-range wireless reception for multi-channel professional audio venues.

Suitable for applications including:

- ✓ Large multi-functional conference halls
- ✓ Indoor and outdoor stage performance venues
- ✓ Hotel grand banquet halls
- ✓ KTV and entertainment clubs
- ✓ Campus auditoriums and lecture theaters
- ✓ Theater and opera houses
- ✓ Exhibition centers and event halls
- ✓ Church worship venues
- ✓ Sports stadiums and arenas
- ✓ Government meeting & press conference rooms



Key Features

1. Wide 450–950MHz full UHF frequency band, matched with cardioid directional antennas, gain adjustable from -16dB to +16dB in 1dB steps for flexible coverage tuning.
2. Ultra-low noise amplifier with noise figure < 0.6dB and high OIP3 > 38dBm, effectively suppressing intermodulation interference for multi-microphone simultaneous operation.
3. Main unit features > 25dB high isolation, standard 50Ω BNC interfaces, VSWR < 2, delivering pure, stable RF signal transmission.
4. One set of antennas supports 2–4 wireless microphone receivers, simplifying layout and reducing redundant antenna wiring in large venues.
5. Built-in 4 groups of 12V DC power output up to 1A to power active antennas directly; real-time voltage digital display monitors power status intuitively.
6. Accepts directional high-gain antennas for long-distance wide-area coverage in large venues, avoiding signal dropouts.
7. Standard 1U rackmount host with digital screen, compact directional antennas with independent gain adjustment display for on-site quick debugging.
8. Wide-range AC 100–240V power input, low power consumption and reliable continuous operation for conference, stage and entertainment audio systems.

Technical specifications

Model		VM-S120C
Antenna Specs	Frequency Range	480 – 950 MHz
	Radiation Pattern	Cardioid directivity
	Polarization Mode	Linear polarization
	Adjustable Gain	–16 ~ +16 dB, 1 dB per step manual adjustment
	VSWR	< 2
	Amplifier Noise Figure	< 0.6 dB
	Amplifier OIP3	> 38 dBm
	Antenna External Power	DC 6–12 V
	Operating Current	150 mA
	Interface	BNC connector
Main Unit Specs	Operating Frequency Range	450 – 950 MHz, tolerance ≤ ±10%
	Total System Gain	0 dB ± 1 dB
	Port Isolation	> 25 dB
	Input / Output Impedance	50 Ω
	Signal Interface	BNC connector
	Built-in Antenna Power Supply	DC +12 V / 200 mA, center pin positive
	DC Output Terminal	Max 12 V DC / 1 A, 4 groups, center pin positive
	AC Input Power	100–240 V AC, 50/60 Hz, total power 36 W