

# Product Specifications

## SM87A Supercardioid Condenser Microphone

### Overview

The SM87A is a rugged, lightweight supercardioid condenser microphone with superior rejection for clear reproduction of warm and accurate lead vocals. Designed with a three-stage shock mount for low self-noise, and a tight polar pattern that excludes unwanted sound sources, the SM87A is an excellent choice for sound reinforcement in noisy or reverberant environments.

### Features

- Highly directional supercardioid pickup pattern
- Controlled low-frequency roll-off
- Very low RF and magnetic hum susceptibility
- Minimally affected by varying load impedance
- Built-in wind and pop filter
- Transducer element shock mounted
- Rugged construction for outstanding reliability
- Field-usable over a wide range of temperature and humidity conditions
- Accepts a wide variety of phantom power sources, including DIN 45 596 voltages of 11 and 52 Vdc



SM87A

### Available Models

<b>SM87A</b>	Includes Stand Adapter and Zippered Pouch
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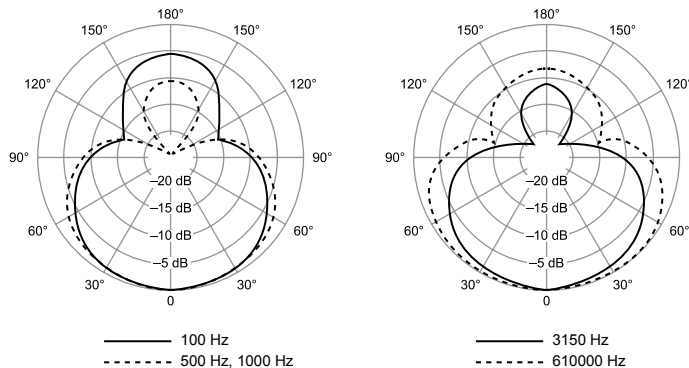
### Specifications

Type	Condenser
Frequency Response	50 to 20,000 Hz
Polar Pattern	Supercardioid
Sensitivity (at 1,000 Hz)	Open Circuit Voltage: -52.5 dBV/Pa (2.4 mV) (1 Pa = 94 dB SPL)
Impedance	Rated at 150 ohms (100 ohms actual $\pm 20\%$ ) Recommended minimum load impedance: 800 ohms
Output Clipping Level	1000 Ohm Load at 1,000 Hz: -6 dBV (0.5 V)
Maximum SPL (at 1,000 Hz)	140.5 dB (0.25% THD, 1000 ohm load)
Self-Noise	24 dB typical, A-weighted 26 dB typical, weighted per DIN 45 405
Dynamic Range (1000 ohms)	116.5 dB (maximum SPL to A-weighted noise level)
Signal-to-Noise Ratio	70 dB at 94 dB SPL (IEC 651) S/N ratio is difference between 94 dB SPL and equivalent SPL of self-noise A-weighted
Polarity	Positive pressure on diaphragm produces positive voltage on pin 2 relative to pin 3
Power Requirements	11 to 52 vdc, 1.2 mA
Case	Aluminum construction with steel grille and satin black finish
Connector	Three-pin professional audio connector (male XLR type)
Net Weight	200 grams (7 oz)
Dimensions	192 mm (7-9/16 in.) L x 50 mm (2 in.) W at the widest point

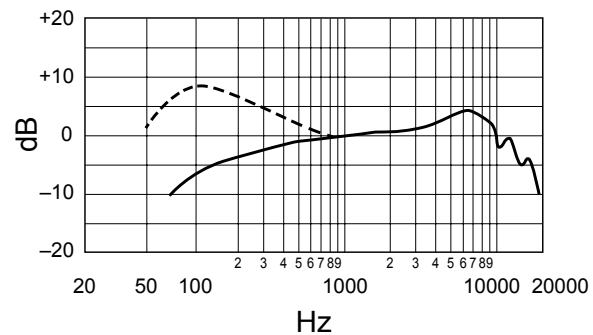
### Optional Accessories and Replacement Parts

<b>A25D</b>	Microphone Clip	<b>RK128</b>	Replacement Cartridge and Shock Mount	<b>A55M, A55HM</b>	Isolation Mount
<b>A85WS</b>	Microphone Windscreen	<b>RK214G</b>	Replacement Screen and Grille		

### Polar pattern



### Frequency response



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