

SIRIUS MIC200 SOUND MEASUREMENT SYSTEM

- CRITICAL SOUND MEASUREMENTS
- HIGH AMPLITUDE ENVIRONMENTS
- HIGH-TEMPERATURE ENVIRONMENTS

Polarize your condenser microphones to measure sound in the most demanding applications with the highest possible stability and accuracy. SIRIUS MIC200 is designed for high amplitude measurements with classic 200V externally polarized microphones that offer supreme temporal and temperature stability.

FEATURES

- **High dynamic range:** DualADC technology provides 160 dB dynamic range
- **Fast acquisition:** 200 kS/s sample rate supports high-frequency microphones
- **Multi-brand microphone support:** Industry-standard 7-pin LEMO connector supports every microphone brand
- **TEDS support:** automated setup of TEDS-equipped microphones
- **High channel count:** use as many MIC200s as required for your applications
- Software included: award-winning DewesoftX software is included
- **Dedicated sound solutions:** Class 1 IEC SLM and a complete set of advanced ISO compliant measurements: Sound Power, Sound Intensity, Sound Quality, RT60
- **IEC acoustic calibration services:** IEC 61672, IEC 61260, IEC 60651, IEC 61094-4, etc. with the ability to order everything already calibrated
- **Multifunction and extensible:** Use in conjunction with any other Dewesoft DAQ system and maximize your measurement capabilities – simply add additional sensors and simultaneously capture temperature, vibration, video, strain, etc. while always staying within the same software, with all data perfectly synchronized.

WHY USE EXTERNAL POLARIZATION?

The main advantage of external polarization is freedom in the choice of microphones. It opens access to a broader selection as more models are available, which again gives flexibility in advanced R&D measurements. External polarization is an advantage whenever:

- High temporal stability is required
- High temperatures are expected (e.g., 150 °C / 302° F)
- High amplitudes are expected
- Higher frequencies need to be measured
- High grade of accuracy and lower noise floor is required

SOFTWARE INCLUDED

Award-winning DewesoftX is included with every SIRIUS system. Powerful math and extensive analysis options are built-in, including: octave analysis, FFT, and mathematical analysis with visualization, sequencing, and data export to a wide variety of popular formats.

SIRIUS MIC200

160 dB dynamic range 8-channel polarized microphone DAQ system

Inputs		
Input types	Voltage (Externally polarized microphones)	
ADC Type	24-bit delta-sigma dual core with anti-aliasing filter	
Sampling Rate	Simultaneous 200 kS/sec	
Dual Core Ranges (Dual Core)	±10 V (±500 mV)	±500 mV (NA)
Input Accuracy @ 1 kHz	±0.1 % of reading	±0.1 % of reading
Dynamic Range @ 10 kS/s (Dual Core)	-139 dB (-160 dB)	-134 dB (NA)
Typ. Noise floor @ 50 kS/s (Dual Core)	-109 dB (-125 dB)	-100 dB (NA)
Typ. THD @ 200 kS/s (Signal: -1 dBFS @ 1 kHz)	-94 dB	-92 dB
Typ. SFDR @ 200 kS/s (Signal: -1 dBFS @ 1 kHz)	97 dB	93 dB
Typ. CMR @ 50 Hz / 400 Hz / 1 kHz	140 / 133 / 126 dB	140 / 133 / 126 dB
Gain Drift	Typ. 10 ppm/K, max. 40 ppm/K	
Gain Linearity	<0.03 %	
Input Coupling	AC 0.35 Hz (3 Hz, 10 Hz per SW)	
Excitation		
Preamplifier Excitation Voltage	±14 V	
Polarization Voltage	200 V	
Polarization Voltage Accuracy	±0.5 %	
Protection	Continuous short to ground	
Additional Specifications		
Input connector	7-pin LEMO 1B	
TEDS support	Standard (Class 2)	

