Sound Microphone (MIC-S01)

Data you want, when you want it…

MIC-S01 is a high-precision Class 1 Sound-Level microphone featuring digital MEMs microphone, a powerful DSP engine with built in equalization and filtering pipeline as well as real-time percentile calculation and FFT at up to 48KHz sample rate. Internal memory comprises 512MB of flash storage. MIC-S01 features low power operation, a serial host interface and multiple configuration and control functions. MIC-S01 is the ideal companion for GSS vibration sensors, but can operate standalone where needed.

Features

- Rugged aluminium housing
- 512MB flash storage
- Digital MEMs microphone capsule
- Omnidirectional, free field
- Class 1 standard (equalised to +/-0.5dB)
- Flat frequency Response
- Low Distortion up to 115dB SPL
- High Signal to Noise ratio
- Internal processing, storage and clock
- TTL 232 interface for configuration and data
- Supports firmware upgrade
- Standalone Mode with external power pack
- Configurable options include:-
    - Sample Rate & Sample Size
    - Reporting Interval
    - Real Time Clock
    - Default Weighting and Response Time
- Configurable Triggering on dBA

Microphone Specifications

Technology	Digital MEMS
Standards	**IEC61672 Class 1**
Sample Frequency (Hz)	8000 to 48000
Signal to Noise (dB)	64.5dB (A)
Frequency Response	20Hz-20KHz
Acoustic Overload	120dB
Distortion	2.2% at 115dB SPL
Equalization	Flat 10Hz to 20KHz
Sound Frequency Weighting	Fast (100ms), Slow (1s)
Short Leq (ms)	100 / 125
Buffer Size (MB)	16
Storage Capacity	512MB
Measurement Results	Leq, LeqAv, Lmin, Lmax, L1,L5,L10,L50,L90,L95,L99
Trigger Threshold (dB (A))	50dB-100dB
Recording Time (minutes)	Up to 30 at 48KHz
Operating Temperature (°C)	-10 to 60

Global Sensing Solutions Limited
Rm 605 Bonham Strand Commercial Centre
44-46 Bonham Strand West, Hong Kong
info@globalsensingsolutions.com