



Array 24: Microphone Phased Array System

- Applications: Acoustical Consulting
Noise control engineering
Education
- Features: 24 miniature microphones in a 36 inch octagonal array
Your company's logo covering the array for a powerful branding opportunity
Built-in optical camera
 Beamforming images labeled by SPL and superimposed on optical image
Imaging over 100 Hz – 40 kHz (microphone specification covers 20 Hz – 20 kHz)
Several frequency ranges:
 Narrowband
 1/3 and 1/12 octave band, kHz bands
 OASPL over a specified range
Maximum SPL: 124 dB at microphones, 118 dB free field
Unsteady analysis
 Isolate transient sounds
 Create acoustic videos
Very fast beamforming (about 1 second per image in many cases)
Advanced options built in
 Enhance resolution mode
 Better than the classical limit
 TIDY deconvolution
 Quantitative integrated spectra over selected Regions of Interest
 Lower sidelobe levels (12 dB typical)
 Wide band (up to OASPL)
 Improved resolution
 Dramatically improved for wide band sources
 Designed for coherent source distributions
 DAMAS2 deconvolution
 CLEAN-SC deconvolution
 MUSIC super resolution algorithm
 Orthogonal Beamforming
 Wind turbine mode
 Generalized Inverse beamforming
 Applies to coherent and incoherent source distributions
 Generalization of Nearfield Acoustic Holography
 Produces synthetic directivity patterns
 Sweep modes
 Depth, Time, Frequency
Additional options
 Focused copy
 Dedopplerization for moving sources
Standard audio data files compatible with external analysis packages such as Matlab
Turn-key system including
 Array with stand and custom shipping case
 Data acquisition (24 bit, 96 kHz) in a 2U portable rack case
 Laptop computer (Apple MacBook Pro)
 One-year warranty, e-mail support, and software updates