The Mikado is a handheld acoustic camera designed for troubleshooting noise and vibration issues across various industries, including aerospace, automotive, electronics, and research. This all-in-one, portable device features a 96-channel microphone array, an integrated Intel® RealSense™ Depth Camera for Full HD video and depth information, and runs on Noisemap Mobile software for real-time acoustic measurement and analysis. Powered by a rechargeable Bosch battery, the Mikado offers full autonomy and flexibility, allowing users to perform measurements in diverse environments either handheld or mounted on a tripod. It supports both on-device data recording and basic frequency/time domain analyses, with the option to transfer data to a workstation for advanced processing using Noisemap Pro software. With a dynamic range of 15–50 dB and a frequency response ranging from 10 Hz to 24 kHz, the system provides high-resolution acoustic mapping for precise sound source localization and classification.