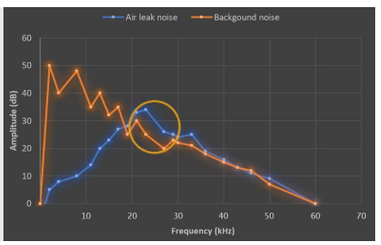
6 THINGS TO LOOK FOR IN AN ACOUSTIC IMAGING CAMERA

What are the critical features to consider before making a final purchasing decision?

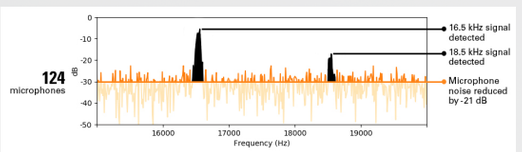
1 EFFECTIVE FREQUENCY RANGE

Having a wide frequency range doesn't necessarily mean your acoustic imaging camera will detect more sounds. The effective frequency range for distinguishing compressed air leaks from background factory noise is between 20 and 30 kHz, while the optimal range for detecting partial discharge from a safe distance is 10 to 30 kHz.



2 OPTIMAL NUMBER OF MICROPHONES

In the pursuit of quieter noises, more is better. This is because a single microphone, while capable of picking up sound (signal), also creates a small amount of sound itself (noise). Adding more microphones improves the signal-to-noise ratio, allowing an acoustic imaging camera to pick up more sound without noise interference.



3 SOUND DETECTION RANGE

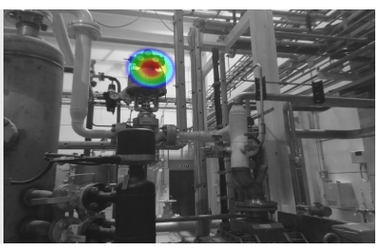
Adding just the right number of microphones to an acoustic imaging camera can also improve the chances of picking up very quiet noises from a long distance. For example, quadrupling the number of microphones can double the sound detection range.

4 MICROPHONE PLACEMENT

The placement of microphones helps an acoustic camera determine the direction and location of sounds. Microphones need to be grouped closely together to ensure they collect enough data to correctly determine from what direction they originated.

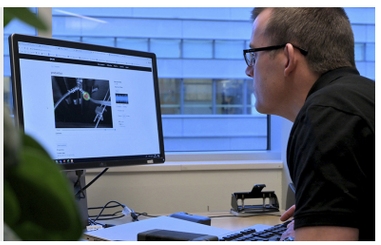
5 MICROPHONE PERFORMANCE

Adding too many microphones has diminishing returns: you either need to add a lot of processing power or reduce the sound resolution to accommodate the number of mics. With 124 microphones and advanced processing power, the FLIR Si124 provides industry-leading detection sensitivity, excellent acoustic image resolution and a great range.



6 INTELLIGENT ANALYTICS

The final features to consider are the computing power and analytics. Look for an acoustic imaging camera like the FLIR Si124, which offers on-camera analytics, automatic image upload when connected to your Wi-Fi, easy-to-understand reporting, and predictive analysis using an AI/web tool.



To read more about these critical acoustic imaging camera features, go to Flir.com/6-things-to-know-about-Si124