



The future in motion



**UltraVision Security Systems, Inc.**  
*Product Backgrounder: LifeLocator™*

UltraVision Security Systems, Inc. is the originator, developer and manufacturer of LifeLocator™, a life safety and rescue product which is rapidly proving to be the definitive sensor technology in finding victims trapped in debris piles. Using ultra wideband (UWB) technology, LifeLocator detects fractions of motion, even extremely shallow breathing, allowing for the most injured victim of a building collapse, avalanche or any other natural or man-made disaster to be located. In addition to the advancements in sensor technology which enable shallow breathing detection, the company has incorporated product hardware and software features that enable life-saving advantages like deployment in seconds rather than minutes or hours, a high degree of mobility—meaning more of a disaster area can be covered in much less time--and an easy-to-use PDA that reduces the need for advanced training of rescue personnel to use the system. As a result of the company's scrupulous standards of development and, consequently, proven usefulness in the field, LifeLocator is internationally accepted as the standard in rescue and recovery when disasters like earthquakes, floods, explosions or similar occurrences result in victims trapped under debris piles of all materials, natural or man-made.

LifeLocator uses ultra wideband UWB technology to greatly improve the odds of rescue over recovery in life-threatening instances like building collapses due to weather, fire or catastrophic attack, avalanches, flash floods, earthquakes or other natural disasters. Ultra wideband technology is the most advanced technology for life rescue, locating victims by sensing even minor movement or shallow breathing. Motion and breathing can be detected whether the victim is located beneath man-made materials—steel-reinforced concrete, brick or pavement, for example— in debris piles or an intact structure, or located within natural material debris piles such as those caused by mudslides or avalanches.

The application of UWB overcomes more traditional rescue system shortcomings. Victims who are breathing but unable to move or speak, which would often eliminate the possibility of detection by audio-based systems, can be found with the LifeLocator. False positives from wind shifts or other bio-sensitivities that hamper canine detection and rescue don't affect LifeLocator. Detection occurs in less than 30 seconds and is not affected by rescue-area-generated sounds or other noise. The UVSS sensor emits signals that are relayed in real-time to rescue personnel via a PDA that accurately and rapidly provides target information like location and distance to the victim. The UWB technology in LifeLocator is omni-directional and provides superior range and field of view over traditional technologies like video probes and audio-based systems. Furthermore, LifeLocator is wireless, eliminating the time-costly deployment of probes, cables or wiring to search for victims. Ease of mobility over treacherous ground further enhances the system's in-field effectiveness.

