

# Object Detection & Tracking at the Tactical Edge

CXSurge is Octo's AI, ML, and mixed reality (MR) solution for locating targets of interest, closing the gap of your Find, Fix, Finish, Exploit, Analyze (F3EA) cycle. It offers a unique approach to monitoring events on the ground and enables users to virtually "see through" buildings, walls, and solid structures by displaying critical detections to ATAK, IVAS, or HoloLens devices—all in real time.

**For military and first responders, identifying and locating targets on the ground in real time as situations evolve is critical to mission achievement. Delays can mean the difference between life and death.**

## Track Targets Beyond Line of Sight

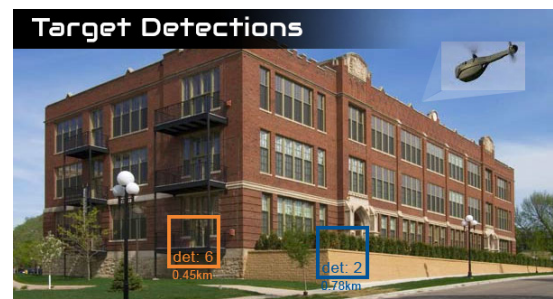
Solid structures create tactical blind spots, putting end users at greater risk. With CXSurge, MR presents information to users in real time in an intuitive way. Current object detection and target tracking methods are not designed for 3D MR environments like IVAS. Rather than requiring users to look at a dedicated display and interpret a remote video feed, an MR view allows teams to use intelligence gathered from tactical sensors like micro UAS and generated by edge AI models in a seamless way, overlaid on their natural view of the environment.

## Why CXSurge?

CXSurge fuses MR and AI driven computer vision to allow operators to track and view multiple targets in MR or night vision goggles such as IVAS or ENVG-B.

Current Aided Target Recognition (AiTR) applications visualize targets from a limiting top down viewpoint and require end users to watch a 2D screen, taking them "out of the fight." CXSurge overcomes these deadly impediments.

If your team is ready to maximize the power of real time location detection at the tactical edge, contact us for a demo at [olabs@octo.us](mailto:olabs@octo.us).



**CXSurge fuses MR with computer vision to deliver true MR-enabled 360° situational awareness to small units, infantry, first responders, and rescue personnel.**