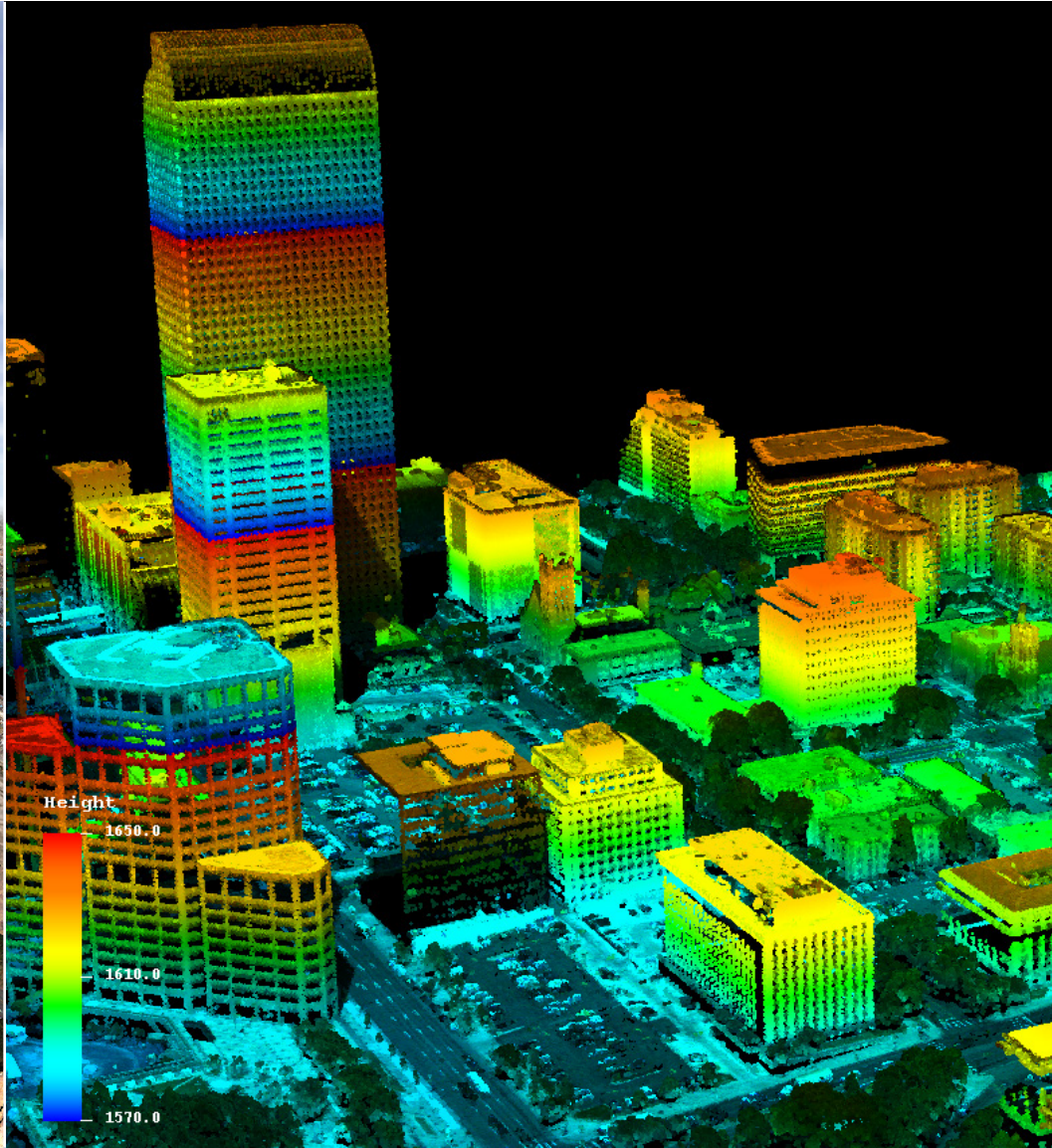
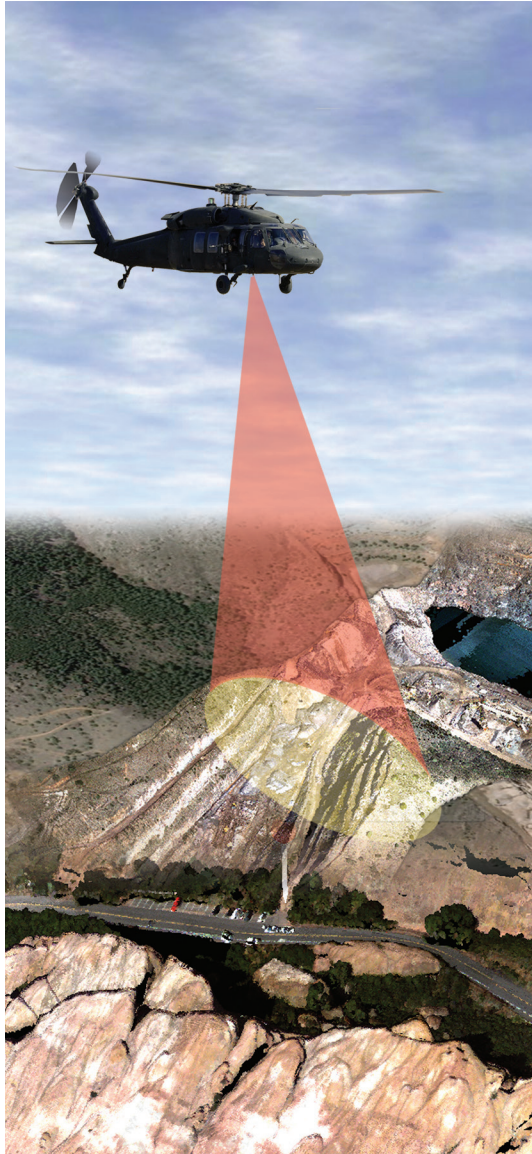


TOTALSIGHT™ 3D IMAGING LIDAR



GO BEYOND WITH BALL.®

Our real-time TotalSight™ 3D imaging LIDAR system provides the information you need to plan ahead, identify hazards and execute your mission.

OVERVIEW

Our real-time, full-motion Flash 3D LIDAR imaging system, provides warfighters and first responders critical geolocation information that can be easily manipulated and shared while on the move. This real-time fusing and downlinking of multi-spectral video with 3D LIDAR data provides unsurpassed informational awareness, so you can plan and execute your mission with confidence.

We can tailor the system to satisfy a wide range of mission objectives for a variety of operational platforms, with laser power and receive aperture scaled to support your unique range and coverage needs.

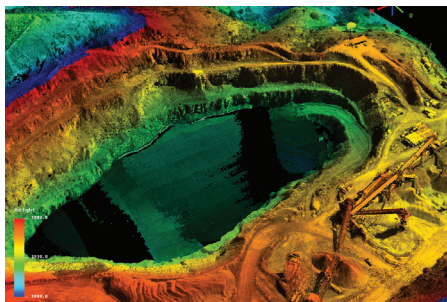
OUR ROLE

The baseline LIDAR sensor has two 30-hertz sensing channels: a 3D LIDAR sensor and a co-boresighted context camera (additional context cameras can be added). Due to its innovative array sensor, the LIDAR sensor does not require mechanical scanning to cover the field of view. Data from the sensor arrays are formatted and fused in real time via an integrated FPGA/SBC. Data processing occurs in real time during collection and is locally stored and/or transmitted. Processing of the payload integrated GPS/IMU sensor allows real-time geolocation of any point within the image. Real-time mosaic stitching algorithms are used to generate broad area coverage scenes as shown below. Data output is compatible with existing LIDAR commercial off-the-shelf software.

Our Flash LIDAR prototypes are at TRL 6+ based on numerous field trials on rotary- and fixed-wing airborne platforms. Several on-going research and development projects continue to enhance the system data fusion and tactical decision aids.

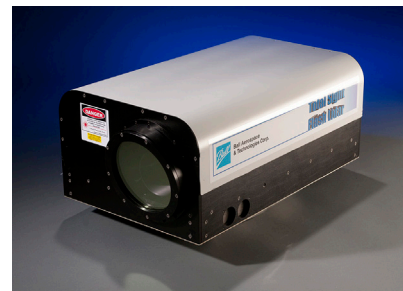
Two Flash LIDAR prototypes are available for demonstration and can be configured for operation on user-supplied platforms.

Broad area coverage scene

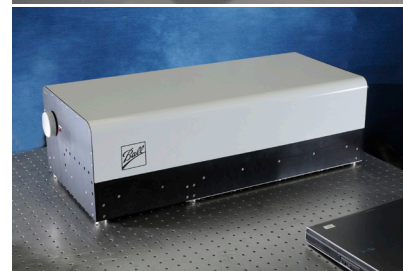


QUICK FACTS

- Provides the ability to “see over the next hill” in real time, with true geolocation precision and easily manipulated images — a game changer for operational forces
- Enables Special Forces and forward air controllers with real-time, “eyes on target” for precise geolocation information
- The capability for tactical mission ground forces and first responders to receive 3D imagery in real time and easily manipulate and share the imagery while on the move
- Allows day/night fused 3D imagery for hazard detection, identification and avoidance for helicopter flight support
- Has data rates that are compatible with existing RF downlinks



*Ball Total Sight
3D Flash LIDAR*



*Ball Total Sight
3D Flash LIDAR
with internal
pan mirror*