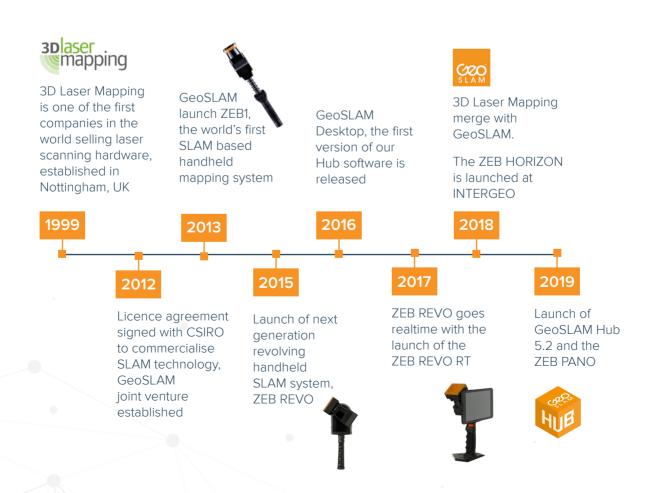# The ZEB Family

For Geospatial Business Intelligence

GeoSLAM

GeoSLAM is a market leader in 3D geospatial technology solutions. Our unique "go-anywhere" technology is adaptable to all environments especially spaces that are indoor, underground or difficult to access, providing accurate 3D mapping without the need for GPS.

We design and manufacture world-leading technology solutions that deliver rapid results and save time and money. Easy to install and use, within minutes you can build a highly accurate 3D model of any environment.

Our journey

3D Laser Mapping is one of the first companies in the world selling laser scanning hardware, established in Nottingham, UK

GeoSLAM launch ZEB1, the world's first SLAM based handheld mapping system

GeoSLAM Desktop, the first version of our Hub software is released

3D Laser Mapping merge with GeoSLAM.

The ZEB HORIZON is launched at INTERGEO

1999	2013	2016	2018

2012	2015	2017	2019

2012 — Licence agreement signed with CSIRO to commercialise SLAM technology, GeoSLAM joint venture established

2015 — Launch of next generation revolving handheld SLAM system, ZEB REVO

2017 — ZEB REVO goes realtime with the launch of the ZEB REVO RT

2019 — Launch of GeoSLAM Hub 5.2 and the ZEB PANO

“ GeoSLAM technology was at the top of our list to scan our heritage project due to its speed and range **”**

Historic England

Geo
SLAM

Capture

Process

Action

Our future

“ Technology is driving us further forward each day, in every part of our lives.

At GeoSLAM that's no different, we're on a journey to transform industries, digitalise workflows and engineer solutions that save time, money and increasingly deliver competitive advantage to our customers. From the launch of the ZEB1 in 2013 to today, the rapid speed of adoption of our technology is staggering.

Talk to us about how we can drive your world further forward, faster. **”**

Shelley Copsey. CEO
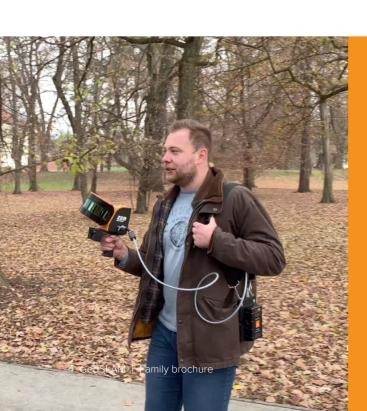
ZEB HORIZON

Technical specification

Handheld	Backpack	UAV Ready
Range		100m
Protection Class		IP54
Scanner Weight		1.3kg
Points per Second		300,000
Relative Accuracy		1 - 3cm
Raw Data File Size		100-200MB a minute
Processing		Post Processing
Battery Life		3.5hrs

Effortless Data Capture

Your tool to capture, view and understand the world around you.

Great for indoor and outdoor use, including spaces where features are positioned further apart.

Lightweight and rugged, simple to use, fast to capture and easy to process giving you the most accurate information you need to make the most important decisions.

66 High quality data captured 8 times faster than using traditional methods **99**

Geocentar d.o.o.

Geocentar used the ZEB HORIZON for a recent forestry project.

Data was accurate to 3cm and they were able to save a huge 15 hours in the field, leading to significant cost savings.

ZEB
REVO-RT

Technical specification

Real-time data processing | reduce occlusions

Range	30m
Protection Class	IP51
Scanner Weight	850g
Points per Second	43,000
Relative Accuracy	1 - 3cm
Raw Data File Size	100MB a minute
Processing	Real-time
Battery Life	1.5hrs

*reference plate sold separately

Capture with Confidence

Scan, process and track your progress as you go.

The ZEB-REVO RT is handheld, lightweight and easy to use, allowing you to rapidly build highly accurate 3D pointclouds within minutes, while on the move.

Gain real-time insight into your scan, see the areas you've covered (or missed) and the route you've taken before you leave site. Simple, comprehensive SLAM for everyone.

66 The ZEB REVO RT provides us with the necessary accuracy and is much more time efficient than other laser scanning technologies 99

Entropy Group LLC

Using the ZEB REVO RT on a first responder exercise, Entropy Group reduced response times of law enforcement officers by 21%

ZEB
REVO

Technical specification

Handheld	Backpack
Range	30m
Protection Class	IP64
Scanner Weight	850g
Points per Second	43,000
Relative Accuracy	1 - 3cm
Raw Data File Size	100MB a minute
Processing	Post Processing
Battery Life	4hrs

*reference plate sold separately

Rugged and Reliable

The dependable lightweight, handheld scanner, take it with you wherever you go.

With it's IP64 rating and simple operation, the ZEB-REVO is ideal for harsh environments from underground mines to intricate caves.

Complete whole surveys in minutes not hours. Share data quickly and easily thanks to minimal data file sizes.

66 We've always been confident in our ability to keep our projects to the nearest inch or less. In bringing the ZEB REVO into our arsenal of tools, we've kept the accuracy we've always had, but introduced an efficiency that allows our experts to get out there and do more for our clients 99

Precision Property Measurements

Precision Property Measurements case study

"We were tasked with surveying a vast private house in order to generate accurate as-built construction drawings for renovation. The unique challenge was that the 20,000 sq. ft Santa Barbara residence was occupied at the time, requiring the survey to be completed quickly and in an unobtrusive manner.

PPM (Precision Property Measurements) chose the ZEB REVO over other terrestrial scanners for our residential projects because of the speed and volume of data acquisition at exactly the level of accuracy required by our clients.

In order to keep disruption to residents to a minimum, we decided to tackle the task in two swift scans over two days. The first scan consisted of data collection of the extensive ground floor and communal areas, and took around 90 minutes to complete. The private, bedroom wing was off limits on this day.

The second scan incorporated these sleeping quarters, as well as gathering plenty of overlap from the lower floors to enable the 2 scans to be merged. After just 140 minutes of scanning, the entire house had been surveyed.

A typical residential property of this size would have usually taken around 4 days on-site for one surveyor. PPM were able to slash this time and complete the majority of the survey work in less than 2 and a half hours with the ZEB-REVO.

The use of GeoSLAM Hub software for post-processing and merging of the two datasets allowed the project team to generate a complete digital twin of the complex structure.

GeoSLAM's cutting edge mobile mapping technology was able to deliver an accuracy down to the nearest inch."

Words by
Greg Davies, Director of Survey Technology

ZEB
PANO

Capture and create real estate floorplans with interactive 360° panoramic photography for enhanced property surveys.

The ZEB PANO uses our leading SLAM algorithm to automatically and accurately position panoramic photos on a floorplan for an interactive viewing experience.

Already used by leading property marketing companies, the ZEB PANO is set to revolutionise the real estate surveying industry.

▶ Quick and easy property surveying

▶ No need to send seperate teams to a property

▶ Error free data and high-resolution panoramic photography

▶ 360° interactive digital data

▶ Stop and go camera operation

ZEB
HORIZON

Take your ZEB HORIZON to the skies with the UAV mount. Capture from new heights with improved relative accuracy without the need for an IMU, even in areas with no GPS.

Sold as an accessory to go alongside the ZEB HORIZON, with a range of 100m and payload of 3.7kg, the ZEB HORIZON is great for airborne applications.

ZEB HORIZON is your tool to capture, process and understand the world around you.

ZEB
ACCESSORIES

Backpack

Compact and lightweight, the backpack neatly holds your scanner and accessories. Carry out scans with the data logger stowed inside.

Hard case

Offers ruggedised protection for your scanner and accessories. IP67 rated and waterproof. Travels as hand luggage on most airlines.

ZEB-CAM

ZEB-CAM is a simple add-on option for any ZEB Family member that adds vision, context and colour to your 3D data.

Multi Level Deployment

Robust cradle allows the scanner to be lowered. A lightweight carbon fibre pole reaches heights that are difficult to access.

Reference Plate

Gather control points precisely with the reference plate, simplifying the georeferencing process in GeoSLAM Draw.

Backpack mounts

In some environments, such as difficult to reach or unsafe areas, hands free working is required.

Spherical Targets

Using targets with tribrach adapters you can accurately georeference your ZEB Data.

The complete software solution for GeoSLAM Data

GeoSLAM Hub is a comprehensive software suite that transforms 3D point cloud data into actionable information and valuable deliverables.

As part of GeoSLAM's complete solution, GeoSLAM Hub brings together industry leading SLAM with powerful post processing functionality to deliver complete end to end solutions.

▶ SLAM processing to generate accurate 3D point clouds from mobile data

▶ Automatic registration of multiple scans and geo-referencing of datasets to control

▶ Import, view and interrogate data captured from all GeoSLAM mobile mapping devices

▶ Quick and easy workflows with 'drag and drop' functionality - produce deliverables in minutes

▶ User definable parameters for enhanced SLAM processing

▶ Ability to visualise synched imagery data captured from ZEB CAM

▶ Provides survey-grade data accuracy

Deliverables

GeoSLAM Hub includes simple to use tools for quickly extracting floor plans and sections from point cloud data. It's available in several sector packages.

▶ Create 2D plans, sections and elevations from 3D pointcloud data in minutes

▶ Automatic vectorization of 2D lines allows for rapid floorplan creation

▶ Publish, share and collaborate with multiple stakeholders

▶ Easily export data for use in third party CAD and GIS software packages

▶ Provides survey-grade data accuracy

See more in our GeoSLAM Hub brochure.

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