

3D Laser Mapping Launches Mobile Mapping Data Logger



3D Laser Mapping, a UK-based developer of laser scanning solutions, has made the ZEB1 mobile mapping system easier to use, more portable and more reliable by including a special data recording system. ZEB1 was introduced in 2012 and is a mobile, handheld, rapid laser mapping system.

The ZEB-DL2600 data logger uses state-of-the-art data storage and access technology and is designed to make the ZEB1 even easier to use in the field, eliminating the need for a separate laptop and power supply.

ZEB1 already allows for fast data capture, without complex set-up or the requirement for lengthy data processing, commented Dr Graham Hunter, founder and chairman of 3D

Laser Mapping. The newly developed ZEB-DL2600 data logger builds on these characteristics making ZEB1 even more portable and even easier to use.

The handheld ZEB-DL2600 data logger automatically records, in real time, the millions of individual laser scanned measurements captured by the ZEB1, eliminating the need for an additional laptop. Developed by 3D Laser Mapping it is a fully ruggedised (IP65) bespoke system which incorporates an embedded Intel Atom dual core processor and 64GB solid state drive in a tough aluminium enclosure. Data capture and data download (to external USB storage device) is fully automated and controlled by tri-coloured status LED's. The device also includes an integrated Lithium battery pack that powers both the data logger and ZEB1 laser scanner.

In simple terms the ZEB-DL2600 reduces the amount of equipment the operator has to carry, Dr Hunter explained, as it combines enough memory and data storage for a full day of continuous surveying together with a power supply for both itself and the ZEB1 laser scanner. Anyone working in the field will understand the huge significance of these simple features.

Developed by CSIRO, ZEB1 uses robotic technology called Simultaneous Localisation and Mapping (SLAM). The ZEB1 system includes a lightweight laser scanner mounted on a simple spring mechanism which continuously scans as the operator walks through the environment. As the scanner loosely oscillates about a spring it produces a rotation that converts 2D laser measurements into 3D fields of view. Its ability to self-localise makes ZEB1 ideally suited for use indoors, underground and in other covered environments where traditional solutions that utilise GPS do not function well.