

# Portable 3D Measuring Instrument in Development



E-Capture R&D, a Spanish technology-based company, has announced the upcoming introduction of an accurate 3D measuring instrument embedded in a tablet. The product, which will be launched at the beginning of 2015, is intended to revolutionise the world of measuring with a new generation of portable, easy-to-use and highly accurate instruments that are ideal for most architectural and civil engineering tasks.

The “EyesMap” tablet holds two rear Sony cameras of 13 megapixels each, a depth sensor and a GPS system amongst others. Such a system is able to measure coordinates, surfaces and volumes of all types of objects up to a distance of 70 to 80m. To the same extent EyesMap can scan advanced photogrammetric pictures with up to 4 million dots in almost 2 minutes. These photographic colour scans will allow the creation of 3D models of

all kinds of objects of different sizes: from little insects to big buildings or landscapes.

According to E-Capture, EyesMap has an outstanding capacity for modelling 3D indoors and outdoors, as well as measuring 3D elements and people or animals moving. The tablet is designed for measuring works and building inspections. Facades, structures, indoors and 3D scans can be done by engineers allowing them to dock EyesMap on a topographic tripod in order to position the instrument in a local coordinates system.

## Computational vision

EyesMap comes in a tablet with Intel's 4th generation i7 processor and 16GB of RAM which gives it an extraordinary performance. The system uses computational vision techniques blended with photogrammetry, precision sensor fine tuning, visual odometer and other advanced images measuring techniques.

The EyesMap project is developed under Windows and it will have a space for developers who wish to realise their own applications for any speciality; this instrument is intended to be very useful for architects, archaeologists, civil engineers, topographers, industrial engineers, as well as all other professionals in arts, medicine video games, security, criminology, etc.

For more information watch [this video](#).

*Image courtesy: E-Capture.*