STONEX

Cube-a Software

Android
Field Software

cube·a

cube-a

Cube-a is Stonex's solution for professional surveying and GIS which has been designed and developed for the Android platform.

Thanks to the flexibility of the Android environment, we have been able to create a simple and intuitive user interface that makes surveyors ready for any work, saving time and increasing productivity.

Full support for touch gestures and the possibility to install it on Smartphones and Tablets are the keys to the success of Cube-a. It also includes support for many languages and adjusts its interface as from the current system language setting.

Cube-a is a modular application which can be customized as needed: GNSS, Robotic and Classic Total Stations, GIS and 3D Modelling modules can be enabled to fulfill any customer need.

Cube-a | Stonex field software

Stonex field solutions for GNSS RTK and Total Station surveys will make operators' work quick and easy, ensuring high productivity in all jobs requiring precision and efficiency.

GNSS

Cube-a is compatible with all Stonex GNSS Receivers. Supports Rover, Rover Stop&Go, Base and Static modes. Various screens provide useful information on the status of the GNSS receiver including the position and the signal quality of the Atlas satellite.

SURVEY

A simple and intuitive survey interface with numerous indicators immediately helps the surveyor to understand what kind of work and in what conditions is taking place. Indicators show various information like solution status, position precision, battery levels, RTK correction delays and more. Intuitive screens allows for an easy change of settings, a view of the collected points, adding new CAD elements and drawings or proceed surveying.

PHOTO & SKETCH

To improve and complete the survey and stakeout functions, you can also use the Photo & Sketch. This function can be used while surveying or even on the already acquired points: take photos and add notes, add and position some indicating arrows or simple hand drawn sketches.
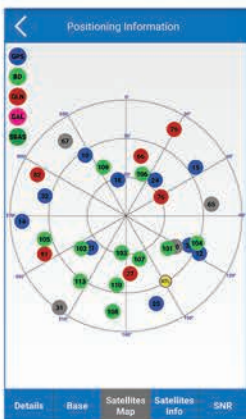
INTEGRATED CAD

Cube-a includes a smart and easy to use CAD feature. The CAD has been designed to work with touch displays and it allows to easily draw points and other CAD entities by mean of a smart pointer which can be moved using one finger and which always transmits to the user a strong confidence of the result achieved. The help of object-snaps like point, mid-point, end-point, intersection and others makes it possible to integrate the survey with new elements directly in the field.
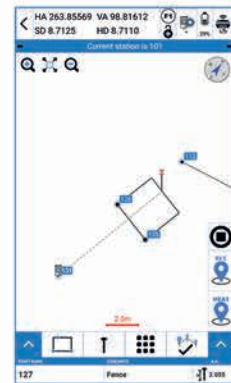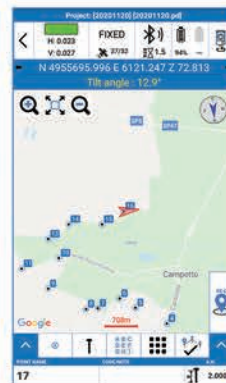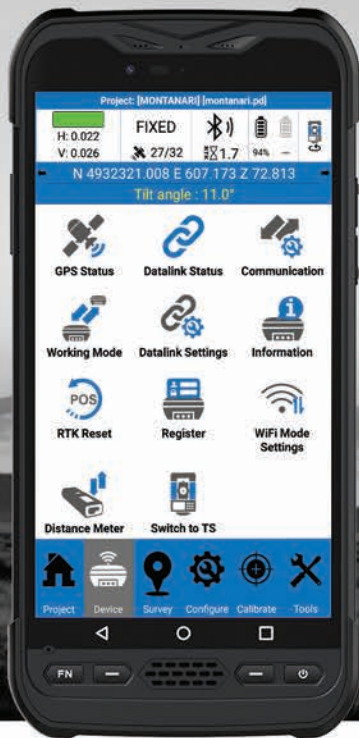
STAKEOUT

A compact interface groups all the stakeout launching commands in one screen for an easier work in the field. Stakeout screens are enriched with both graphical and analytical indicators which guide the surveyor in order to reach the target point.

Thanks to this interface, you can read all the information necessary to complete the stakeout work, to select points or to add them and quickly change all settings. Even in case of small monitors, the information and commands are always smartly arranged and readable, the buttons are clickable without difficulty and some of them can be reduced to leave more space for the map.

TOTAL STATION

Cube-a has been designed to fully support mixed surveys. A Cube-a survey supports GPS points and classical polar stations and measures at the same time. Polar stations can be set to occupy previously collected GPS points or on unknown positions calculated using the Free Stationing program. Likewise, the GPS reference system can be adjusted to match an existing polar survey in local coordinates. Cube-a supports all Stonex Total Stations via Bluetooth.
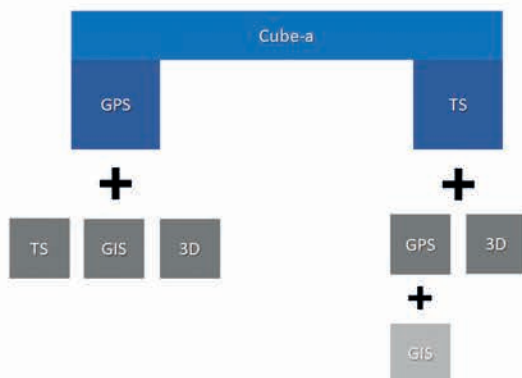
GIS

GIS functionalities are well integrated in the workflow of standard GPS surveying. Thanks to the Cube-a's ability to collect, not only single points but also to automatically draw vectors passing through the collected points, GIS surveying becomes fast and easy. The request to fill in the GIS data is automatic and automatically follows the point or vector acquisition. Data forms can be freely defined using the integrated Feature Set designer or automatically created by Cube-a starting from a sample DBF file. Import and export of standard shapefiles ensures the compatibility and interoperability of Cube-a with virtually any other GIS software.

3D

The 3D Module adds a complete set of commands to perform Surface Modelling in real-time. Base points and constraints selection is by layer. Optional constraints include a perimeter, break-lines, and holes (non-triangulated closed areas). Surface display mode is selectable from wireframe, filled triangles with edges, shaded triangles with edges, or external perimeter with triangulated points. Volume calculations can be easily defined between a model and a horizontal or inclined reference plane. The results, as well as the surface data, can be exported to different file formats.

Cube-a FEATURES

PROJECT MANAGEMENT	GPS	GIS[1]	TS	3D[2]
Job management	✓		✓	
Survey Point Library	✓		✓	
System settings (units, precision, parameters, etc.)	✓		✓	
Import/export ASCII and DXF	✓		✓	
Import/export ESRI shapefiles (with attributes)		✓		
Export Google Earth KML/Send to Google Earth	✓			
Import Raster Image	✓		✓	
Share files by cloud services, e-mail, Bluetooth, Wi-Fi	✓		✓	
Customizable ref. systems also by remote RTCM messages	✓			
Features codes (multiple feature tables)	✓		✓	
Fast Coding Panel	✓		✓	
Define GIS features		✓		
Define GIS attributes		✓		
All brand bluetooth disto support	✓		✓	

GNSS MANAGEMENT	GPS	GIS[1]	TS	3D[2]
Support for Stonex receivers	✓			
Generic NMEA (support for third party receivers) - Rover only	✓			
Receiver status (quality, position, sky view, satellites list, base info)	✓			
Full support for features like E-Bubble, Tilt, Atlas, SureFix	✓			
Network connections management	✓			
Support of RTCM 2.x, RTCM 3.x, CMR, CMR+	✓			
Automatic GNSS model & features detection	✓			
Automatic antenna offset management	✓			
Bluetooth and Wi-Fi GNSS connection	✓			

TS MANAGEMENT	GPS	GIS[1]	TS	3D[2]
TS Bluetooth			✓	
TS Long Range Bluetooth			✓	
Search and prism tracking (Robotic only)			✓	
Compensator interface			✓	
Station on point			✓	
Free station / Least squares resection			✓	
TS orientation st.dev. and check orientation			✓	
Topographic basic calculation			✓	
Rotate to GPS position[3]			✓	
Rotate to given point			✓	
Export TS raw data			✓	
Export mixed GPS+TS raw data	✓		✓	

SURVEY MANAGEMENT	GPS	GIS[1]	TS	3D[2]
Localization by one point and by multiple points	✓		✓	
Transformation from GPS to grid and vice versa	✓			
Cartographic predefined reference systems	✓		✓	
National grids and geoids	✓			
Integrated CAD with o-snaps	✓		✓	
Layers management	✓		✓	
Custom Point Symbols and Symbol Library	✓		✓	
Entity acquisition management	✓		✓	
Point Survey	✓		✓	
Hidden points calculation	✓		✓	
Automatic point collection	✓		✓	
Control RAW data recording for Static and Kinematic post-processing	✓			
Point stakeout	✓		✓	
Line stakeout	✓		✓	
Height Stakeout (TIN or inclined plane)	✓		✓	
Stakeout reports	✓		✓	
Mixed Surveys[3]	✓		✓	
Measures (area, 3D distance,etc)	✓		✓	
Display functions (zoom, pan,etc)	✓		✓	
Surveying tools (quality, battery and solution indicators)	✓			
Visualization of the drawing on Google Maps/BingMaps/OSM	✓		✓	
Adjust background map transparency	✓		✓	
Map rotation in the direction of walking (using tablet e-compass)	✓		✓	
Tilt/IMU Sensor Calibration	✓			
Info commands (id, distance, area, angle, distance to object)	✓		✓	
Corner Point	✓			
Collect a point by 3 inclination positions	✓		✓	
Record Settings	✓			
COGO (perimeter, area, calculator, etc)	✓		✓	
Freehand sketch + picture of collected points	✓		✓	
Pregeo (Italian Cadastral data)	✓		✓	
Dynamic 3D models (automatic TIN)				✓
Constraints (perimeters, break-lines, holes)				✓
Calculation of Volumes (various methods)				✓
Road stakeout[5]				✓
Raster georeferencing	✓		✓	
Adjust raster images opacity	✓		✓	
Connect to Utility Locators		✓		
LandXML export				✓
LandXML import[5]				✓

GENERAL	GPS	GIS[1]	TS	3D[2]
Automatic SW updates[4]	✓		✓	
Direct technical support	✓		✓	
Unique license for tablet/handheld software version	✓		✓	
Multi-language (includes support for many languages and adjusts its interface as from the current system language setting)	✓		✓	

1 GIS available only if GPS module enabled.
2 3D available only if GPS and/or TS module enabled
3 Available only if GPS and TS modules enabled
4 Internet connection required. Additional charges could apply.
5 3D module enhancement - automatic update of v6 planned for 2022.

Cube-a

GPS + TS + GIS + 3D
TS + GPS + 3D + GIS

Illustrations, descriptions and technical specifications are not binding and may change

STONEX AUTHORIZED DEALER

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