STONEX

PRODUCT CATALOG

2020

OCTOBER UPDATE

www.stonex.it

STONEX

Part of UniStrong

ABOUT
THE COMPANY

EUROPE HQ

Headquartered on the outskirts of Milan, Italy, STONEX is one of the world leader company on measurement and survey, with over 80 qualified distributors worldwide.

Joined together with an unbeatable professional expertise Stonex offers a wide range of top quality services, to satisfy all pre-sales and post-sales needs.

Stonex is a part of Beijing UniStrong Science & Technology Co. Ltd, global provider of GNSS, positioning and timing technology for the geospatial market.

Thanks to the integration of different positioning technologies and software the wide range of solutions allows to meet the needs of many fields of application and industries, such as:

- Building and construction
- Land survey and cadastral survey
- GIS data collection
- 3D Scanning
- Agriculture and smart farming
- Land and structure monitoring

AMERICA HQ

The Stonex Headquarters in America is located in the United States, in the city of Concord, New Hampshire. Opened in 2019, this office aims to strengthen the presence of Stonex in North America.

With USA Headquarters as a base, Stonex has the opportunity to be closer to the needs of its customers through greater territorial coverage and strengthening of global business.

FOLLOW US

2020

SURVEYING
PRODUCTIVITY
INNOVATION

www.stonex.it

A worldwide Network of
Professional Dealers

OUR
PRODUCTS

Each geospatial requirement can be solved with a Stonex solution.

- GNSS SURVEYING
- OPTICAL SURVEYING
- 3D SCANNING
- SOFTWARE
- SPECIAL PROJECTS

SURVEYING
GNSS | TS | GIS

3D SCANNING
TERRESTRIAL | HANDHELD

SOFTWARE
CAD | GIS | 3D

SPECIAL PROJECTS
CUSTOM SOLUTIONS
CONSTRUCTION | AGRICULTURE | MARINE

CONTENTS

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SURVEY GNSS

Powerful solutions for all Surveying jobs

Stonex offers a broad range of GPS and GNSS receivers to meet your needs. Stonex receivers combine the world's most advanced technology with practical, integrated designs to simplify your daily work.
Designed for the requirements of Professional Surveyors, GNSS Stonex portfolio includes a full range of options, allowing the users to choose the best solution for each one's needs.

S700A Modular GNSS system

Stonex S700A is a compact, high-performance GNSS receiver features a multiconstellation 700 channels GNSS board. The customers have the ability to purchase an entry level version, with just L1 GNSS and, at any time, it is possible to upgrade the receiver to the full version via activation code.

S700A supports GPS, GLONASS, BEIDOU, GALILEO, QZSS and IRNSS. S700A full version supports also L-Band correction. The unique internal antenna combines GNSS, Bluetooth and Wi-Fi integrated modules to optimize space and increase performance. This technology provides stronger and cleaner signal monitoring, which means unprecedented results. Designed for all day use in surveying applications, S700A includes several features: Linux Operating System, WEB UI interface, 4G Modem, high battery capacity, Type-C connector and IP67 certification.

Stonex S700A GNSS receiver full version, thanks to aRTK function and Atlas® correction service is an ideal solution for any surveying field work and in particular difficult areas. Atlas® delivers worldwide centimeter level correction data through L-band satellite communication.

MULTI CONSTELLATION

Stonex S700A with its 700 channels, provides an excellent on board real time navigation solution with high accuracy. All GNSS signals (GPS, GLONASS, BEIDOU, GALILEO, QZSS and IRNSS) are included. The entry level version has only L1 and full version has L1, L2 and L3 frequencies.

WEB UI CONTROL

To initialize, manage, monitor the settings of the receiver and to download data using laptops or PCs, smartphones or tablets with Wi-Fi capability.

NEW BATTERY AND TYPE-C

Stonex S700A is delivered with a large capacity lithium battery that gives you up to 9 hours working. It is also equipped with Type-C connector.

4G MODEM

S700A has an internal 4G modem that operates with all world signals.

TWO VERSIONS

L1
L1-L2-L3

The ability to purchase an entry level version and then upgrade the receiver to the full version provides flexibility to all professionals in the field.

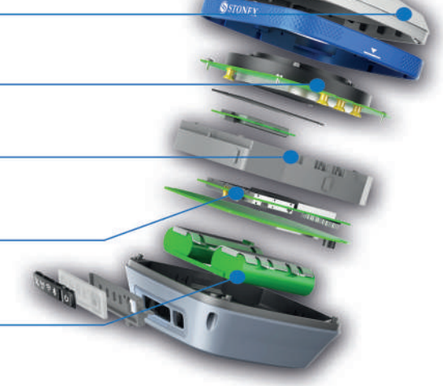
STRONG DESIGN | IP67

BLUETOOTH | WI-FI | GNSS ANTENNA

4G MODEM

LINUX OS | GNSS BOARD

NEW BATTERY | TYPE-C CONN.



S700A Full Version

Atlas® Correction Service & aRTK atlas

S700A full version is a Stonex GNSS Receiver capable to automatically select the best combination of GNSS signals with the possibility to receive Atlas® RTK L-band. ATLAS is an exclusive PPP technology that provides real-time, centimeter-level positions. PPP (Precise Point Positioning) is a positioning technique that removes or models GNSS system errors to provide a high level of position accuracy from a single receiver.
A PPP solution depends on GNSS satellite clock and orbit corrections, generated from a network of global reference stations. Once the corrections are calculated, they are delivered to the end user via satellite through L-Band signal.

Atlas® is a subscription for S700A aimed to achieve 3 different levels of accuracy depending on the precision type that you need:
- BASIC, 50cm 95% (30cm RMS)
- H30, 30cm 95% (15cm RMS)
- H10, 8cm 95% (4cm RMS)

Atlas® provides a precise centimeter-level positioning around the world, perfect when working in difficult areas.
aRTK is an innovative feature available in Stonex S700A GNSS Receiver that continues generating precise positions up to 20 minutes in case the receiver loses the land based RTK correction source.

S850A With Atlas and E-Bubble

Equipped with an advanced 700 channels GNSS board and capable of supporting multiple satellite constellations, including GPS, GLONASS, BEIDOU, GALILEO, QZSS and IRNSS. Stonex S850A GNSS receiver is an ideal solution for any surveying field work. S850A has also L-Band correction.

The advanced receiver design gives to the S850A an excellent signal tracking ability and interference resistant capacity. Advantages of portability and speed of operation make S850A GNSS receiver particularly suitable for fieldwork in areas of complex terrain.

Stonex S850A is equipped with all the necessary connections, has integrated Bluetooth and internal Wi-Fi functionality; has a built-in dual frequency UHF radio, 410-470 MHz and 902.4-928 MHz and the worldwide compatible 4G GSM modem.

Stonex S850A integrates also the E-Bubble functionality that allows the measurement of difficult points with the pole not levelled.

MULTI CONSTELLATION

Stonex S850A with its 700 channels, provides an excellent on board real time navigation solution with high accuracy. All GNSS signals (GPS, GLONASS, BEIDOU, GALILEO, QZSS and IRNSS) are ncluded, no additional cost.

E-BUBBLE

S850A thanks to the E-Bubble can display directly on the software if the pole is vertical and the point will be recorded automatically when the pole is levelled. It is possible to measure points with an inclination of the pole up to 30°.

HIGH BATTERY CAPACITY AND TYPE-C

Stonex S850A is delivered with a large capacity lithium battery and Type-C connector to recharge it easily.

RADIO AND GSM

S850A has integrated UHF double frequency radio, 410-470MHz and 902.4-928MHz. Through the 4G GSM modem a fast internet connection is guaranteed.

RUGGED RTK

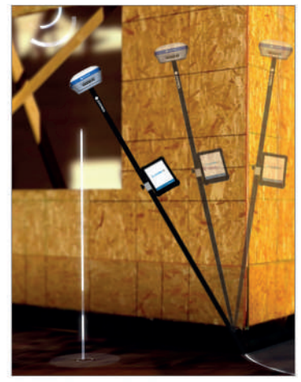
With IP67 Certification Stonex S850A will ensure operations in various kinds of extremely tough environments.

S850A

E-Bubble functionality

Stonex S850A integrates an E-Bubble that allows the measurement of difficult points with the pole not levelled. You can calculate the correct coordinate of a point by measuring from 3 different positions. It is possible to measure points with an inclination of the pole up to 30°, even in harsh environments and in the presence of magnetic fields.

In addition, you can view the instrument bubble directly within the survey software without worrying about checking the bubble of the pole. This makes the acquisition of points extremely fast.



Atlas® Correction Service & aRTK atlas

S850A is a new Stonex GNSS Receiver capable to automatically select the best combination of GNSS signals with the possibility to receive Atlas® RTK by L-band. ATLAS is an exclusive PPP technology that provides real-time, centimeter-level positions. PPP (Precise Point Positioning) is a positioning technique that removes or models GNSS system errors to provide a high level of position accuracy from a single receiver.

A PPP solution depends on GNSS satellite clock and orbit corrections, generated from a network of global reference stations. Once the corrections are calculated, they are delivered to the end user via satellite through L-Band signal.

Atlas® is a subscription for S850A aimed to achieve 3 different levels of accuracy depending on precision type that you need: Atlas® provides a precise centimeter-level positioning around the world, perfect when working in difficult areas.

Main features

- No RTK base station or RTK network required
- Correction data is continuously transmitted by satellite L-Band, delivering global coverage
- Bridging RTK outages for uninterrupted accurate positioning
- Autonomous remote position within centimeter accuracy
- Retain position accuracy during RTK data stream losses
- Keep position accuracy as long as needed

S900 New

Powerful Precision Performance

S900 is the result of the continuous evolution of the Stonex GNSS integrated receivers. Featuring a high accuracy multi constellation antenna, a powerful UHF dual frequency transmitter and a GSM 4G modem, for a fully integrated multi-communication choice; all combined with a light and modern design.

Stonex S900 integrated GNSS receiver tracks all the present constellations and satellite signals GPS, GLONASS, BEIDOU, GALILEO, QZSS, IRNSS and through the upgradable firmware offers the opportunity to be day by day updated with the latest available features.

On S900 it is possible to insert 2 smart hot swappable batteries at the same time, ensuring a maximum of 12 hours of operation without stopping. To initialize, manage, monitor the settings of the receiver and to download data is available a user friendly Web UI.

S900 is also equipped with E-Bubble funcionality and the optional IMU technology. Fast initialization, up to 60° inclination.

MULTI CONSTELLATION

Stonex S900 with its 555 channels, provides an excellent on board real time navigation solution with high accuracy. All GNSS signals (GPS, GLONASS, BEIDOU, GALILEO, QZSS and IRNSS) are included, no additional cost.

DOUBLE FREQUENCY RADIO

S900 has an integrated UHF double frequency radio, 410-470MHz and 902.4-928MHz. The needs of each country are supported.

E-BUBBLE + IMU

S900 thanks to the E-Bubble can display directly on the software if the pole is vertical and the point will be recorded automatically when the pole is levelled. The IMU technology is also available as optional, only a fast initialization is requested.

INTELLIGENT BATTERIES

The dual slot for two smart hot swappable batteries gives you up to 12 hours of battery life. The power level can be checked and seen on the controller or directly on a led bar on the battery.

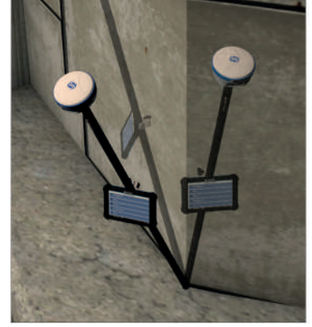
4G MODEM

S900 has an internal 4G modem that operates with all world signals, a fast internet connection is guaranteed.

S900 New

E-Bubble functionality

Stonex S900 integrates an E-Bubble that allows the measurement of difficult points with the pole not levelled. You can calculate the correct coordinate of a point by measuring from 3 different positions. It is possible to measure points with an inclination of the pole up to 60°, even in harsh environments and in the presence of magnetic fields.
In addition, you can view the instrument bubble directly within the survey software without worrying about checking the bubble of the pole. Thanks to measurement routine integrated into the field software, the management of tilt function is simple and intuitive.



IMU Technology

S900 GNSS receivers have as optional feature the new IMU System that allows tilted measurement (TILT). Thanks to the new IMU technology, the edges of the buildings, the difficult and inaccessible points are no longer a problem.

What is an Inertial Measurement Unit (IMU)?
An Inertial Measurement Unit (IMU) is a self-contained system that measures linear and angular motion usually with a triad of gyroscopes and accelerometers.

What do Inertial Sensors Measure?
- Gyroscope measures angular velocity
- Accelerometer measures linear acceleration
- Magnetometer measures magnetic field strength

What are the performances of the S900 with IMU?
- Fast initialization
- Up to 60° inclination
- 2 cm accuracy 30°
- 5 cm accuracy 60°
- Fast and precise survey
- No problem with electromagnetic disturbances

Stonex S900 with IMU System makes reliable every measurement, for both surveys and the stake-out jobs, and makes extremely fast the acquisition of points: up to 40% of the field work time can be saved!

S900A *New*

Powerful precision with Atlas®

Stonex S900A is equipped with a high performance GNSS board with 800 channels and capable of supporting multiple satellite constellations: GPS, GLONASS, BEIDOU, GALILEO, QZSS and IRNSS, including L-Band correction.

Through the 4G GSM modem a fast internet connection is guaranteed for the reception of correction data and the management of the maps in the background. In the amazingly compact structure of the receiver the Bluetooth and Wi-Fi modules allow always reliable data flow to the controller, and the integrated TX/RX UHF radio with selectable frequencies, make S900A the perfect system for a GNSS Base + Rover.

Stonex S900A integrates E-Bubble sensor that allows the measurement of difficult points with the pole not levelled. You can calculate the correct coordinate of a point by measuring from 3 different positions.

S900A is also equipped with the optional IMU technology. Fast initialization, up to 60° inclination and the correct coordinates of a point with a simple click.

MULTI CONSTELLATION

Stonex S900A with its 800 channels, provides an excellent on board real time navigation solution with high accuracy. All GNSS signals (GPS, GLONASS, BEIDOU, GALILEO, QZSS and IRNSS) are included, no additional cost.

4G MODEM

S900A has an internal 4G modem that operates with all world signals, a fast internet connection is guaranteed.

E-BUBBLE + IMU

S900A thanks to the E-Bubble can display directly on the software if the pole is vertical and the point will be recorded automatically when the pole is levelled. The IMU technology is also available as optional, only a fast initialization is requested.

INTELLIGENT BATTERIES

The dual slot for two smart hot swappable batteries gives you up to 12 hours of battery life. The power level can be checked and seen on the controller or directly on a led bar on the battery.

DOUBLE FREQUENCY RADIO

S900A has integrated UHF double frequency radio, 410-470MHz and 902.4-928MHz. The needs of each country are supported.

S900A *New*

Atlas® Correction Service & aRTK

S900A is a Stonex GNSS Receiver capable to automatically select the best combination of GNSS signals with the possibility to receive Atlas® RTK L-band. ATLAS is an exclusive PPP technology that provides real-time, centimeter-level positions.
Atlas® is a subscription for S900A aimed to achieve 3 different levels of accuracy depending on precision type that you need.
Atlas® gives the precise centimeter-level positioning around the world, perfect when working in difficult areas.
aRTK is an innovative feature available in Stonex S900A GNSS Receiver that continue generating precise positions up to 20 minutes in case the receiver loses the land based RTK correction source.

BASIC
50 cm 95% (30 cm RMS)

H30
30 cm 95% (15 cm RMS)

H10
8 cm 95% (4 cm RMS)

SureFix Robust RTK Positioning

SureFix is the new processor that runs in combination with GNSS engine to provide high fidelity RTK quality information. The SureFix processor takes several inputs and determines the quality of the RTK solution in the form of "quality indicators". The indicators are then combined with RTK data and provide the user with high fidelity information about the quality of the RTK solution.

IMU Technology

S900A GNSS receivers have as optional feature the new IMU System that allows tilted measurement (TILT). Thanks to the new IMU technology, the edges of the buildings, the difficult and inaccessible points are no longer a problem.

What is an Inertial Measurement Unit (IMU)?

An Inertial Measurement Unit (IMU) is a self-contained system that measures linear and angular motion usually with a triad of gyroscopes and accelerometers.

What are the performances of the S900A with IMU?

- Fast initialization
- Up to 60° inclination
- 2 cm accuracy 30°
- 5 cm accuracy 60°
- Fast and precise survey
- No problem of electromagnetic disturbances

Stonex S900A with IMU system makes reliable every measurement, for both survey and stake-out jobs, and makes extremely faster the acquisition of points: up to 40% of the field work time can be saved!

S980

The perfect base GNSS receiver

Stonex S980 integrated GNSS receiver tracks all the present constellations and satellite signals: GPS, GLONASS, BEIDOU, GALILEO, QZSS and IRNSS.

Through the 4G GSM modem a fast internet connection is guaranteed and the Bluetooth and Wi-Fi modules allow always reliable data flow to the controller. These features combined with the integrated 5 Watt radio make S980 the perfect base station receiver.

The color touch display and the possibility of connecting an external antenna make S980 an extremely effective receiver for every type of job.

S980 is also equipped with E-Bubble functionality and the optional IMU technology: fast initialization, up to 60° inclination.
S980 1PPS port can be used in applications that require precise synchronization time to ensure that multiple instruments work together or that use the same parameters for system integration based on precise time.

MULTI CONSTELLATION

Stonex S980 with its 555 channels, provides an excellent on board real time navigation solution with high accuracy. All GNSS signals (GPS, GLONASS, BEIDOU, GALILEO, QZSS and IRNSS) are included, no additional cost.

2-5W RADIO

S980 has integrated 2-5W UHF radio with 410-470MHz frequency. Our receiver is equipped with an external radio antenna to work better.

E-BUBBLE + IMU

S980 thanks to the E-Bubble can display directly on the software if the pole is vertical and the point will be recorded automatically when the pole is levelled. The IMU technology is also available as optional, only a fast initialization is requested.

COLOR TOUCH DISPLAY

S980 comes with a convenient color touch display for an easy management of the most important functions.

EXTERNAL GNSS ANTENNA

S980, through the appropriate connector, can be connected to an external GNSS antenna therefore it is transformed from an RTK receiver to CORS.

EXTERNAL RADIO ANTENNA

BLUETOOTH | WI-FI | 4G | GNSS ANTENNA

RADIO 5W

BATTERY 13.600mAh | TYPE-C CONN.

COLOR TOUCH DISPLAY

EXTERNAL GNSS ANTENNA | 1PPS PORT

E-Bubble functionality & IMU technology

Stonex S980 integrates an E-Bubble that allows the measurement of difficult points with the pole not levelled. It is possible to measure points with an inclination of the pole over 30°, even in harsh environments and in the presence of magnetic fields.
In addition, you can view the instrument bubble directly within the survey software without worrying about checking the bubble of the pole. This makes the acquisition of points extremely fast. Thanks to measurement routine integrated into the field software, the management of tilt function is simple and intuitive.

S980 GNSS receivers have as optional feature the new IMU System that allows tilted measurement (TILT). Thanks to the new IMU technology, the edges of the buildings, the difficult and inaccessible points are no longer a problem.

What are the performances of the S980 with IMU?
- Fast initialization
- Up to 60° inclination
- 2 cm accuracy 30°
- 5 cm accuracy 60°
- Fast and precise survey
- No problem with electromagnetic disturbances

Stonex S980 with IMU System makes reliable every measurement, for both survey and the stake-out jobs, and makes extremely fast the acquisition of points: up to 40% of the field work time can be saved!

S980A

GNSS Receiver with 5 Watt radio and Atlas®

Stonex S980A integrated GNSS receiver tracks all the present constellations and satellite signals GPS, GLONASS, BEIDOU, GALILEO, QZSS and IRNSS.

Through the 4G GSM modem a fast internet connection is guaranteed and the Bluetooth and Wi-Fi modules allow always reliable data flow to the controller. These features combined with the integrated 2-5 watt radio make S980A the perfect base station receiver.

The color touch display and the possibility of connecting an external antenna makes S980A an extremely effective receiver for every type of job.

S980A is also equipped with an E-Bubble and the optional IMU technology: fast initialization, up to 60° inclination.
S980A has a 1PPS port which can be used in applications that require precise synchronization time to ensure that multiple instruments work together or that use the same parameters for system integration based on precise time.

STONEX SURVEYING SYSTEMS

MULTI CONSTELLATION

Stonex S980A with its 800 channels, provides an excellent on board real time navigation solution with high accuracy. All GNSS signals (GPS, GLONASS, BEIDOU, GALILEO, QZSS and IRNSS) are included, no additional cost.

2-5W RADIO

S980A has integrated 2-5W UHF radio with 410-470MHz frequency. Our receiver is equipped with an external radio antenna to work better.

E-BUBBLE + IMU

On S980A through E-Bubble it can be displayed directly on software if the pole is vertical and the point will be recorded automatically when the pole is levelled. As an optional it is also available the IMU technology, only a fast initialization is request.

COLOR TOUCH DISPLAY

S980A comes with a convenient color touch display for easy management of the most important functions.

EXTERNAL GNSS ANTENNA

S980A, through the appropriate connector, can be connected to an external GNSS antenna and is transformed from an RTK receiver to CORS.

IMU technology

Stonex S980A integrates E-Bubble sensor that allows the measurement of difficult points with the pole not levelled. It is possible to measure points with an inclination of the pole over 30° even in harsh environments and in the presence of magnetic fields. S980A GNSS receivers have as optional feature the new IMU System that allows tilted measurement (TILT).

What are the performances of the S980A with IMU?

- Fast initialization
- Up to 60° inclination
- 2 cm accuracy 30°
- 5 cm accuracy 60°
- Fast and precise survey
- No problem of electromagnetic disturbances

Stonex S980A with IMU system makes reliable every measurement, both survey and the stake out jobs, and makes extremely faster the acquisition of points: up to 40% of the field work time can be saved!

SureFix Robust RTK Positioning

SureFix is the new processor that runs in combination with GNSS engine to provide high fidelity RTK quality information. The SureFix processor takes several inputs and determines the quality of the RTK solution in the form of "quality indicators". The indicators are then combined with RTK data and provide the user with high fidelity information about the quality of the RTK solution.

Atlas® correction service & aRTK atlas

S980A is a Stonex GNSS Receiver capable to automatically select the best combination of GNSS signals with the possibility to receive Atlas® RTK L-band. ATLAS is an exclusive PPP technology that provides real-time, centimeter level positions. Atlas® is a subscription for S980A aimed to achieve 3 different levels of accuracy depending on precision type that you need:

- BASIC, 50cm 95% (30cm RMS)
- H30, 30cm 95% (15cm RMS)
- H10, 8cm 95% (4cm RMS)

S990A

High Performance with Atlas® and IMU

Stonex S990A is a 800 Channels GNSS receiver characterized by a new feature that enhance the performances of field surveys. The new IMU System allows tilted measurement (TILT): quick initialization, fast and precise survey.

S990A Receiver is equipped with all important connectivity capabilities: Bluetooth, Wi-Fi, UHF radio and 4G modem. The internal battery of 10.200mAh allows to work for 9 hours and can be recharged via a Type-C connector. The color touch display and the WebUI are an easy and fast way to have the complete control of the receiver.

Thanks to aRTK function and Atlas® correction service, Stonex S990A is also able to work in particularly difficult areas. Atlas® delivers world wide centimeter-level correction data through L-band satellite communication and Internet.

1PPS can be applied to scenarios that require precise synchronization time to ensure that multiple facilities work together or that use the same parameters for system integration based on precise time.

MULTI CONSTELLATION

Stonex S990A with its 800 channels, provides an excellent on board real time navigation solution with high accuracy. All GNSS signals ((GPS, GLONASS, BEIDOU, GALILEO, QZSS and IRNSS) are included, no additional cost.

IMU TECHNOLOGY

On S990A is available the IMU technology. Fast initialization, up to 60° inclination.

DOUBLE FREQUENCY RADIO

S990A has integrated UHF double frequency radio, 410-470MHz and 902.4-928MHz. The needs of each country are supported.

4G MODEM

S990A has an internal 4G modem that operates with all world signals, a fast internet connection is guaranteed.

COLOR TOUCH DISPLAY

S990A comes with a convenient color touch display for an easy management of the most important functions.

S990A

IMU Technology

S990A GNSS receiver has the new IMU System that allows tilted measurement (TILT). Thanks to the new IMU technology, the edges of the houses, the difficult and inaccessible points are no longer a problem.

What is an Inertial Measurement Unit (IMU)?

An Inertial Measurement Unit (IMU) is a self-contained system that measures linear and angular motion usually with a triad of gyroscopes and accelerometers.

Stonex S990A with IMU system makes reliable every measurement, both survey and the stake out jobs, and makes extremely faster the acquisition of points: up to 40% of the field work time can be saved!

What are the performances of the S990A with IMU?

- No problem of electromagnetic disturbances
- Fast initialization
- Up to 60° inclination
- 2 cm accuracy 30°
- 5 cm accuracy 60°
- Fast and precise survey

SureFix Robust RTK Positioning

SureFix is the new processor that runs in combination with GNSS engine to provide high fidelity RTK quality information. The SureFix processor takes several inputs and determines the quality of the RTK solution in the form of "quality indicators". The indicators are then combined with RTK data and provide the user with high fidelity information about the quality of the RTK solution.

Atlas® correction service & aRTK atlas

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Atlas® is a subscription for S990A aimed to achieve 3 different levels of accuracy depending on precision type that you need:

- BASIC, 50cm 95% (30cm RMS)
- H30, 30cm 95% (15cm RMS)
- H10, 8cm 95% (4cm RMS)

Atlas® allows you to have centimeter-level measurements all over the world, perfect when working in difficult areas. aRTK is an innovative feature available in Stonex S990A GNSS receiver that continue generating precise positions up to 20 minutes in case the receiver loses the land based RTK correction source.

GNSS RECEIVERS

Product Comparison

		 S700A	 S850A	 S900	 S900A	 S980	 S980A	 S990A
Channels		700	700	555	800	555	800	800
Signals Tracking	GPS	√	√	√	√	√	√	√
	GLONASS	√	√	√	√	√	√	√
	BEIDOU	√	√	√	√	√	√	√
	GALILEO	√	√	√	√	√	√	√
	QZSS	√	√	√	√	√	√	√
	IRNSS	√	√	NO	√	NO	√	√
	L-BAND	Atlas	Atlas	NO	Atlas	NO	Atlas	Atlas
	SBAS	√	√	√	√	√	√	√
aRTK		√	√	NO	√	NO	√	√
Rate Hz		5-20	5-20	5	10-50	5	10-50	10-50
Memory		8 Gb	8 Gb	8 Gb	8 Gb	32 Gb	32 Gb	32 Gb
Bluetooth		√	√	√	√	√	√	√
WiFi		√	√	√	√	√	√	√
Web User Interface		√	√	√	√	√	√	√
OS Linux		√	√	√	√	√	√	√
Display		NO	NO	NO	NO	√	√	√
Radio UHF 410-470MHz		NO	√	√	√	5Watt	5Watt	√
Radio UHF 902.4-928MHz		NO	√	√	√	NO	NO	√
GSM 4G		√	√	√	√	√	√	√
E-Bubble		NO	√	√	√	√	√	√
IMU		NO	NO	√	√	√	√	√
1PPS		NO	NO	NO	NO	√	√	√
External GNSS antenna		NO	NO	NO	NO	√	√	NO
Nr. Battery		1	1	2	2	1	1	1
Weight		1.10 Kg	1.10 Kg	1.30 Kg	1.30 Kg	1.50 Kg	1.50 Kg	1.40 Kg
Operating Temperature		- 30° + 65°	- 30° + 65°	- 40° + 65°	- 40° + 65°	- 40° + 65°	- 40° + 65°	- 40° + 65°
Protection class		IP67	IP67	IP67	IP67	IP67	IP67	IP67

Network & Monitoring

High quality and performance GNSS Reference Receivers

STONEX technology for GNSS reference stations and networks continues to evolve, meeting rapidly changing GNSS technology demands.
STONEX C.O.R.S. stations (Continuously Operating Reference Station) are flexible and adaptable reference server that offer multiple solutions for multiple needs. STONEX C.O.R.S. stations meet the highest demands for reliability and work in the toughest environments. Professionals put them to work on any type of GNSS applications, from campaign and permanent single base stations to RTK networks, from structural monitoring to offshore positioning, or from atmospheric research to seismic studies.

GNSS Reference Station

CORS stations can be used either for the start of a new infrastructure network or for an integration into existing networks. It is possible to use CORS stations as a Rover for special applications (agriculture, machine control, bathymetry, structure monitoring, etc…) and with several software solutions according to the customer's request.

SC2200

SC600
SC600A

The Stonex CORS stations are GNSS multi frequency receiver designed to be used either as stand-alone Reference Stations or as part of a GNSS stations' infrastructure. Stonex CORS stations are typically used as NTRIP server and is the ultimate equipment for all those jobs that are based on GNSS correction data acquisition, processing, distribution and management; moreover, the stations support also the recording of raw data with a high frequency of acquisition.

GNSS Antennas

High Precision Antennas for all survey works

Stonex family of GNSS antennas is designed to enhance and support the performance of Stonex precise positioning receivers. The antennas receive GNSS multi-constellation signals. Each antenna is built to withstand various application and surveying needs. The Stonex antennas can be used in land survey, marine survey, channel survey, seismic monitoring, bridge survey, container operation and agriculture applications.

They have high gain and wide beam width to ensure the signal receiving performance of satellite at low elevation angle. The phase center of these antennas remains constant as the azimuth and elevation angle of the satellites change. Signal reception is unaffected by the rotation of the antenna or satellite elevation, so placement and installation of the antenna can be completed with ease.

SA1800

SA1500

SA3G+C REFERENCE

SA45

cube-net

Cube–net is a GNSS software for centrally controlling and operating GNSS reference stations and networks.
Data from reference stations can be collected to calculate a solution to rover's users for obtaining precise position. Receive all necessary corrections data to determine the absolute position of a rover at any location. Manage subscriptions automatically from web user interface. Performance analysis through real time control of the whole network.

The software manages the 4 main constellations GPS, GLONASS, Galileo and BeiDou in three frequencies and supports the Virtual Reference Station network solution.

The full version includes a Web interface through which users can register and subsequently request the RINEX files of the stations or Virtual RINEX.

suite cube

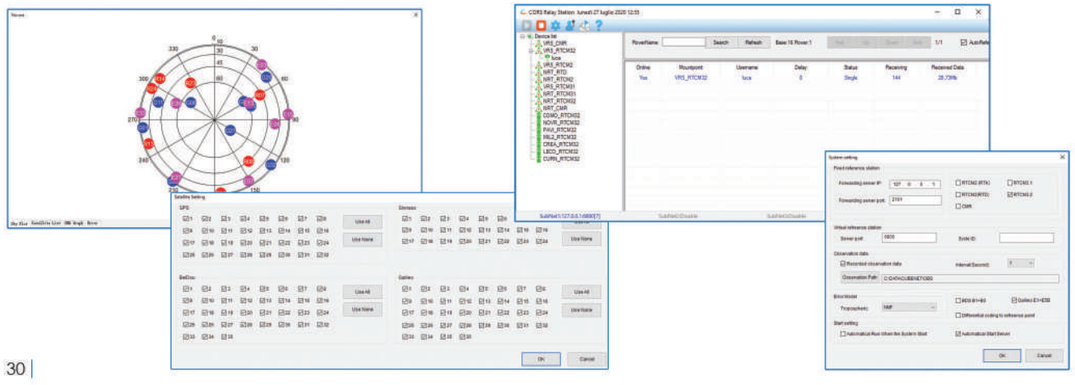
OFFICE SOFTWARE

cube-net

Modules

The Cube-net Software, in its complete version, consists of six different modules:
- Cube-cors: module that allows remote management of network stations
- DataManager: module that allows you to manage the storage of station data and the results of the network calculation
- AccuracyMonitor: module for analyzing the performance of stations
- GNSS.core: is the main component, it deals with the connection of the stations and the network calculation
- GNSS.caster: module for managing network users and distributing differential corrections
- GNSS.web: web site of the network, constitutes an interface for both users and the operator with the service offered. Users can apply for registration and once obtained request the data of the physical or virtual stations. The manager can monitor the status of the network and user activity in real time, publish information and view reports.

Software configuration and management
The software is configured through a graphic interface in a few simple steps:
- System configuration: caster address and port, data storage, automatic start settings.
- Station configuration: connection setting, general information and antenna type, coordinates.
- Network configuration: minimum and maximum distance between stations, virtual station distance, choice of tropospheric model.



GNSS technologies

The software supports the following frequencies and signals:
- GPS: L1, L2, L5
- GLO: L1, L2, L3
- BDS: B1, B2, B3
- GAL: E1, E5a, E5b

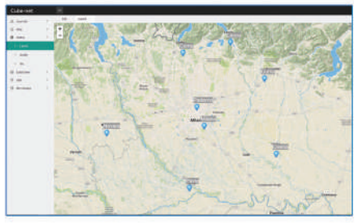
The receivers of the stations of the network managed by the software must be multi-frequency, at least GPS L1 + L2. They don't need to be multi-constellation.
The differential corrections provided by the software can be exploited by receivers of any type.

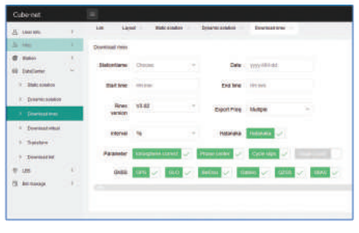
Supported input formats are:
- RTCM2
- RTCM3
- Raw data from Stonex receivers and major receiver manufacturers

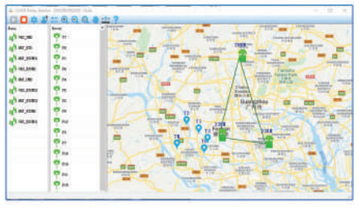
The software supports the following ways of connecting the receivers:
- TCP Server
- TCP Client
- NTRIP Client
- Serial port

Real-time products are of two types:
- Network solution. The software processes a virtual station located near the rover.
- Real station. The software makes available the data of the real stations of the network, with the possibility of automatically receiving the data of the nearest station, chosen by the software based on the position of the rover.

Real-time products are distributed through an NTRIP Caster, so to connect to the software you need to use an NTRIP client.
For users working in post-processing, the data of the real stations are made available in the standard RINEX format with sampling at 1 Hz. The possibility is also offered to create data for a virtual station (Virtual RINEX) located inside the network.
At present the software has shown that it can manage networks of up to 200 stations and 600 simultaneous users.







GIS, Mobile GNSS & Controllers

Solutions for accurate geographic data field collection

GIS solutions combine positioning, communications and software to equip the mobile workforce. GIS products greatly improve productivity in hundreds of industries by geo-enabling field workforces with precision, rugged, and easy to use products.

STONEX provides a wide variety of applications to the GIS industry.

All applications involve the use of innovative STONEX mobile solutions to allow organisations to integrate their field personnel into a bidirectional data flow. Powerful tools for display, query and selection, ensure that field personnel receives the maximum advantage for both the data they already hold and the data they are collecting.

S500 Small and lightweight GNSS Receiver

Compared to traditional GIS products, the S500 is an intelligent, high precision data acquisition receiver that can be used without the need to hold it in your hand and therefore offers greater freedom of movement and flexibility.

Thanks to the internal web interface, the receiver can be configured and prepared to receive RTK differential corrections and ready to be connected to any software for Survey or GIS.

The S500 offers high-precision positioning and is equipped with a high speed 4G module. The positioning is so fast and reliable that it can also be used by vehicles moving at high speed. S500 works with all 4 satellite system (GPS, Glonass, BeiDou, Galileo), support access to external differential RTK signal to get centimeter level positioning results.
Rubber protective cover, increase the protection of the device, non-slip and no damage, the whole device protective class reaches IP67, and it resists 1.2m hard ground drop.

ANDROID SYSTEM
Android system on board

4 CONSTELLATION SYSTEM
GPS, Glonass, BeiDou, Galileo

HIGH PRECISION
High precision positioning, centimetric accurancy

WEB UI
Web interface for controlling and managing settings

DATA TRANSMISSION
Wi-fi, Bluetooth and 4G

S500 GNSS Receiver

From GIS to Topography

S500 is a versatile and flexible instrument, capable to offer high accuracies for the demanding users, switching from GIS to topographic Survey.
Precision Farming, Mapping, GIS data collection, environmental agencies, forestry are just a short list of the fields where Stonex S500 will give a decisive impulse to the productivity and to the quality of the positioning data, with the ability to use the already existent devices, as Smartphones and Tablet with Android, iOS and Windows OS.

S70G

Android Handheld GNSS RTK

S70G is a 4-constellation dual frequency GNSS system (GPS, GLONASS, Galileo and BeiDou) that allows to collect data and photos in the field, in an easy and fast way.
It is supplied with an antenna connected directly to the tablet which guarantees 2cm accuracy, but if required, connecting an external antenna it gains even more precise data.

S70G is equipped with Android 10 operating system and has a highly detailed WUXGA resolution (1920x1200) display for greater detail quality. The 8000mAh battery allows the instrument to work over 8 hours and the IP67 protection makes the device suitable for any environment. S70G is able to work in real time through the reception of RTK corrections, transmitted by a network of GNSS Permanent Stations.

Besides working in real time, it can also record raw data received from satellites for post-processing in the office. This allows the operator to achieve greater precision, enabling to work even in areas where there is not a good coverage of the GSM signal.

STONEX SURVEYING SYSTEMS

4-CONSTELLATION SYSTEM

Stonex S70G has a dual frequency GNSS chip integrated that uses all 4 Constellations: GPS, GLONASS, Galileo, BeiDou; all included, no additional cost.

ANDROID SYSTEM

The receiver is managed by the Android 10 operating system with a simple and intuitive interface.

HIGH QUALITY DISPLAY

The high quality 8" display has a WUXGA resolution (1920x1200) with 500 Nits brightness.

RTK AND POST-PROCESSING

S70G can work in real time with RTK corrections and simultaneously record the raw data for post-processing.

RUGGED

With IP67 Certification Stonex S70G will ensure operations in extremely tough environments.

S70G GNSS RTK

Compact and portable for GIS and Survey applications

cube-a

Cube-a is the Stonex surveying and mapping software designed and developed for 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 it's interface as from the current system language setting.
Cube-a is available in three versions: Cube-a for GNSS, Cube-a for GNSS+GIS and Cube-a for mechanical and robotic Total Stations.

cube-connector

This is Android APP and it has been developed to connect Android devices to Stonex GNSS receivers.
In order to be connected to the GNSS, the Android Smartphone / Tablet must be paired with the GNSS by Bluetooth.
Once the Bluetooth connection has been established, Cube-connector will replace the GNSS readings from the internal device with the ones from the Stonex GNSS receiver.

With the Stonex S70G, through Cube-connector, any customer can easily use his software for GIS / Survey in the Android operating system. Our application will manage all settings and configurations with integrated precision GNSS and will make the correct coordinates available for third-party software.

S7G

GNSS Handheld Receiver

GIS & SURVEY in one solution

Stonex S7G GNSS receiver combine the modern positioning technology and versatility of a powerful handheld, perfect for collecting geographic data and operate fast and accurate measurements. S7G handheld is compact, ergonomic and small size and weight: 234 x 99 mm and 895g.
S7G is powered by a Cortex A8 AM33X 1GHz processor and Windows Mobile 6.5 Professional operating system.
To increase performance and to load the job data is available an SD card slot for external memory (internal 32 GB is included).
S7G integrate a GSM/GPRS modem that provides fast and efficient internet connection directly on the field, and Wi-Fi and Bluetooth technology, that allow the user to receive/transfer data quickly and conveniently on long distances.
Thanks to the 3G internal modem there is also the possibility to improve the accuracy of data, connecting to real time differential correction network provider.

Internal GNSS antenna for centimetric accuracy in RTK environment, a real topographic Rover, all in one handheld receiver

S70

Rugged Controller for GIS

The S70 is a controller designed for GIS applications. It is available as a standalone rover, which can be switched freely whenever and wherever, offering maximum versatility in the system configuration to meet your specific requirements. Consider that the S70 is a triple constellation system, the possible configurations of the use are: GPS/GAL, GPS/GLO/GAL and GPS/BDS/GAL an more.
S70 is able to work in real time through the reception of RTK corrections transmitted by a network of GNSS Permanent Stations.

RUGGED HOUSING
4G LTE AND BLUETOOTH
WLAN DATALINK SUPPORT
HIGH QUALITY DISPLAY
IP67

SH5A

Advanced Controller

STONEX SH5A can be used in any situation wherever the field staff goes.
The advanced manufacturing process ensure that the device is high efficient, steady and durable. It can bring unprecedented experience to all professionals looking for a powerful and adaptable instrument.

ANDROID 9.0
5" (inches)
1280x720 HD
LTE DUAL SIM
WEIGHT 350g
IP67

Android

UT56, UT30 & UT10 Rugged Tablet

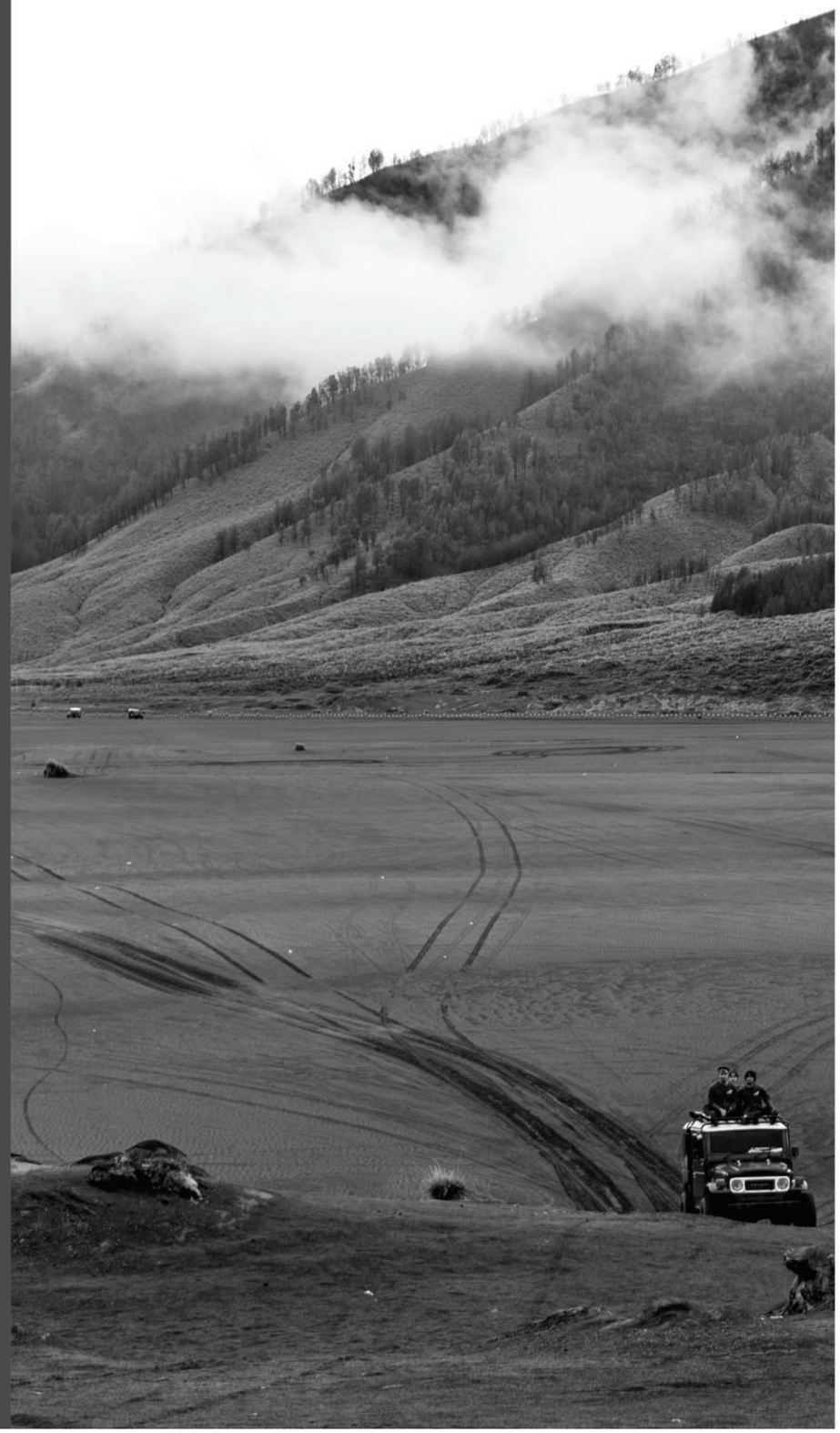
UT56, UT30 and UT10 are reliable and high performance Rugged Controllers. These Android mobile devices are ideal for managing the survey in the field. Resistant to water, dust and shocks (IP67) they are suitable for operating even in the most difficult environmental conditions.
UT56, UT30 and UT10 are equipped with Wi-Fi, Bluetooth, NFC, GSM modem and GNSS receiver technologies.

UT30 | 8”

UT10 | 6”

UT56 | 10.1”

Our controllers together with our Android Cube-a software are modern management tools and allow you to work with maximum productivity



Windows

SRT10W, UT50 & UT20 Rugged Tablet

SRT10W, UT50 and UT20 are reliable and high performance Rugged Tablets. Windows 10 mobile devices are ideal for managing software applications for field survey and data collection. Resistant to water, dust and shocks (IP67/IP68) they are suitable for operating even in the most difficult environmental conditions.
SRT10W, UT50 and UT20 are equipped with Wi-Fi, Bluetooth and GNSS receiver technologies.

SRT10W | 10.1”

UT50 | 10.1”

UT20 | 7”

TABLETS & CONTROLLERS

Product Comparison

		UT50	SRT10W	UT20	UT56	S70	UT30	UT10	SH5A
Processor		2.8 GHz	1.92 GHz	2.4 GHz	2.3 GHz	2.2 GHz	2.2 GHz	2.2 GHz	2.0 GHz
Operation System		Windows 10 IoT	Windows 10 IoT	Windows 10 Pro	Android 10.0	Android 10.0	Android 8.0	Android 8.0	Android 9.0
RAM		8 Gb	4 Gb	4 Gb	4 Gb	4 Gb	4 Gb	4 Gb	3 Gb
Flash Memory		128 Gb	64 Gb	64 Gb	64 Gb	64 Gb	32 Gb	32 Gb	32 Gb
Display		10.1"	10.1"	7"	10.1"	8"	8"	6"	5"
Display Resolution		1280x800	1280x800	1280x800	1920x1200	1920x1200	1280x800	1920x1080	1280x720
Camera		8 Megapixel	5 Megapixel	8 Megapixel	13 Megapixel	13 Megapixel	13 Megapixel	13 Megapixel	13 Megapixel
Connections	Serial RS232	Optional	NO	Optional	NO	NO	NO	NO	NO
	USB Type C	√	NO	√	√	√	√	√	√
	USB Standard	√	√	√	NO	NO	NO	NO	NO
	Wi-Fi	√	√	√	√	√	√	√	√
	Bluetooth	√	√	√	√	√	√	√	√
	HDMI	√	√	NO	NO	NO	NO	NO	NO
	NFC	Optional	NO	Optional	√	√	√	√	NO
GNSS		√	√	√	√	√	√	√	√
RTK correction		NO	NO	NO	NO	√	NO	NO	NO
Connector for GNSS External Antenna		√	NO	NO	NO	√	√	√	NO
GSM		√	NO	√	√	√	√	√	√
Change Battery		√	NO	√	NO	√	√	√	√
Nr. Battery		2	1	1	1	1	1	1	1
Weight		1.540gr	750gr	700gr	800gr	598gr	630gr	360gr	350gr
Size		293x203x21mm	270x183x15.8mm	207x138x20mm	268x183x13.3mm	242x152x19mm	242x152x19mm	165x92x14mm	225x78x14.5mm
Operating temperature		- 20° + 55°	- 20° + 55°	- 20° + 55°	- 10° + 55°	- 20° + 60°	- 20° + 60°	- 20° + 60°	- 20° + 55°
Protection class		IP68	IP67	IP67	IP67	IP67	IP67	IP68	IP67

Cube Suite

STONEX complete Field & Office Software solution

Cube Suite is the complete software solution designed and developed by STONEX for on field and in office use.
Work on field with the software for GNSS RTK, GIS and Total Station surveying. Continue working in office with the software for data transfer, graphical visualization and analytical data processing.

cube-a

Cube-a is the Stonex surveying and mapping software designed and developed for 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 it's interface as from the current system language setting.

Cube-a is available in three versions: Cube-a for GNSS, Cube-a for GNSS+GIS and Cube-a for mechanical and robotic Total Stations.

suite cube

FIELD SOFTWARE

Cube-a

Stonex field software

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

GNSS

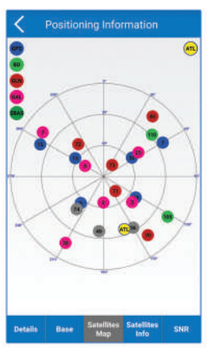
Cube-a is compatible with all Stonex GNSS Receivers, it allows to work in Rover, Base and Static mode. It also provides the opportunity to survey points in Stop&Go, ensuring efficiency, high precision and flexibility in the field.

SKY PLOT

Various screens provide useful information on the status of GPS, we also developed the possibility in the Sky Plot to read the presence of Atlas. The innovation to show Atlas correction is in order to help and facilitate the work of surveyors so that, when this correction is needed, they can know if the satellite is seen and in what position.

SURVEY

Simple and intuitive survey interface with numerous indicators that immediately help the surveyor to understand what kind of work and in what conditions is taking place.
From the solution indicators to the quality indicators, from the information on the batteries to the information on the points, we have developed this control panel from which you can easily change settings, see the collected points, add graphic elements and drawings or proceed surveying.



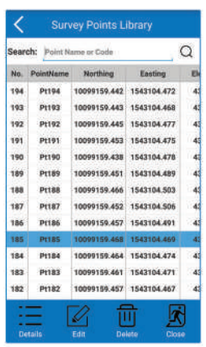


PHOTO & SKETCH

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 points already acquired. The points can be enriched with notes, arrows, texts, photos and simple drawings. The command was developed in order to create a work environment that can be customized to the maximum, in fact the elements that can be inserted can be rotated, moved or deleted.

STAKEOUT

A compact and complete interface of all the functions that can facilitate the work in the field. We have enriched this function with references for fast, accurate and simple movement indicators, in order to speed up the processing and make it pleasant. Thanks to this interface, you can read all the information necessary for the stakeout, select points or add them and quickly change all settings. All this is possible without ever leaving the main screen. 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 improve the visibility of the map.

TOTAL STATION

We have developed the possibility for Cube-a to work on mixed surveys, thanks to the implementation of the support for Total Stations. The Total Stations are supported via Bluetooth. Moreover, having developed the possibility of Free Stationing, Stakeout and Cloud integration, this feature makes the program a reference point for professionals who want a complete and innovative program.

cube·manager

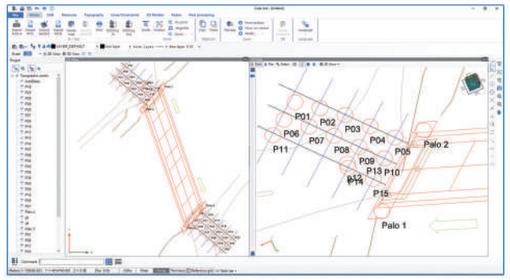
Cube-manager has been developed to work on desktop computers running Microsoft Windows and it implements the tools to download, to manage and to process the data acquired with one of the mobile solutions.

Using this software, you can integrate mixed GNSS RTK and Total Station data, process Raw GNSS data in different ways, import and export the data from and to the most popular known formats.

This software will help operators providing the best functions for data transferring, graphical visualization and analytical data processing.
The software is composed of various optional modules and a free version.

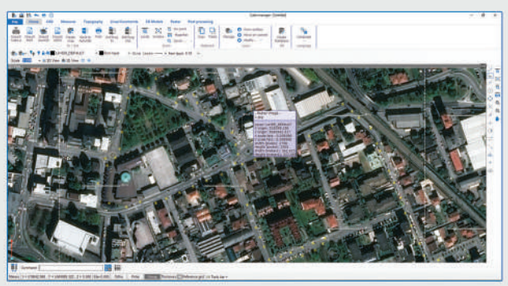
cube·manager

Cube-manager is a software for managing data from GNSS receivers and Total Stations, it is composed of 3 main modules (P, T, M), each one specialized in a series of functions. Among the functions shared by all the modules, you can have plano-altimetric elaborations, generate 3D models and calculate contour lines.
The measurements can be displayed in 2D, 3D and superimposed on raster, satellite or cadastral images. Through a sophisticated internal CAD, you can interact with the data using powerful and complete drawing tools and snap functions, even in 3D. Importing and exporting data are supported in various formats such as DXF, DWG, KML, CSV and others.



cube·link

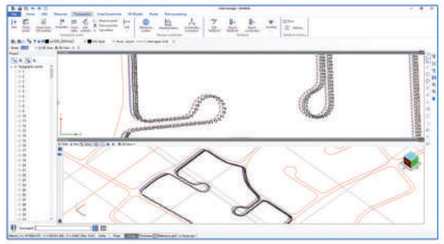
Cube-link is a light and free version of the Cube-manager. The program performs many of the fundamental functions for professionals in the topographic sector.
Among the functions, it can manage TS surveys as well as GNSS surveys, with the possibility to edit the surveys by adding graphic elements. It supports numerous data formats when importing and exporting. It is constantly updated and users can take advantage of technical support.



Cube-manager Modules

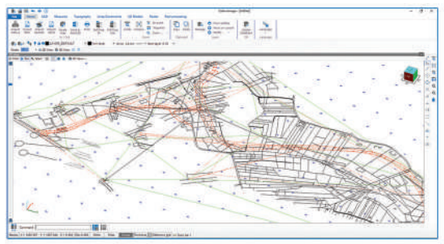
Cube-manager-p

The P is the Cube-manager's optional module dedicated to the post-processing. It offers the possibility to perform correction calculations with maximum accuracy. In addition to the basic features of the software, this module provides functions for the calculation of Stop&Go post-processing, Static post-processing for single and multiple bases, Kinematic post-processing, and least-squares Network Adjustments. Cube-manager-p is constantly updated to improve its performance.



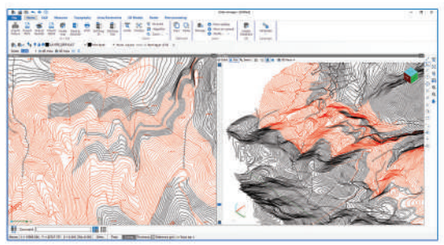
Cube-manager-t

The T is the Cube-manager's optional module that enriches and completes the topographic functions of the software. This module provides sophisticated functions of roto-translation and coordinate conversions. It enhances the management of TS surveys by integrating the traverse calculations and the 2D network calculation. It allows the georeferencing of raster images. The aim of our developers, when implementing these functions, is always simplicity and intuitive use; in addition to that, users can always make use of technical support.



Cube-manager-m

The M is the Cube-manager's optional module dedicated to modeling. This is the module designed for professionals who will work on constraint triangulations, volume calculations, contour lines, height profiles etc. In this case, the users will have all the CAD commands, COGO commands and functions on the graphic entities provided in the basic software core but will also be able to perform even more specific functions such as those mentioned above.



Total Stations

High Technology and Quality

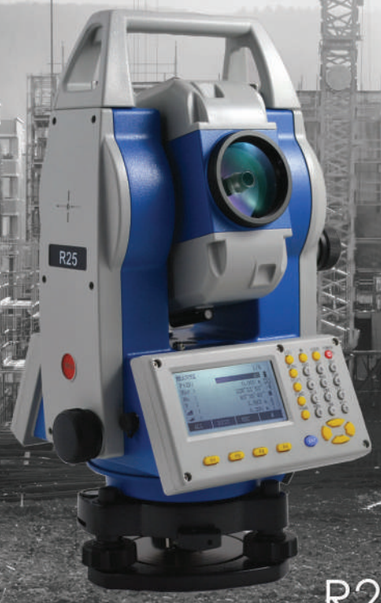
STONEX Total Stations are simple and durable, designed and built to meet all Customers' needs, allowing easiness of use to everyone in full autonomy. Fast, intuitive, reliable and precise, STONEX Total Stations are optical precision tools designed to support high-quality professional for all types of topographic job ensuring high performance for Surveying and Engineering.

R80

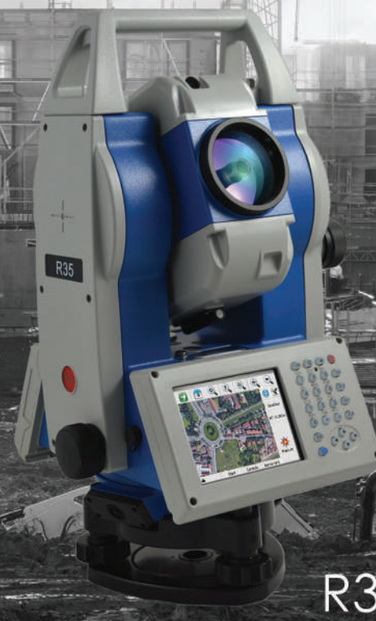
Motorized
Total Station

R1 Plus

R15



R25



R35

R1Plus

The companion of every professional surveyor

Stonex R1 Plus Total Station, precise distance and angles measurements, concentrated in 5 Kg of pure technology.

The perfect tool whenever the topographic works requires a light and fast machine, all day working thanks to 26 hours of continuous operating time.

The onboard field programs, included as standard, make R1 Plus suitable for any construction site, cadastral, mapping and staking out, works.

No limitation for distance measurements, up to 5.000 m with a single prism - 600 m reflectorless (KGC 90%) – and 2" as angular accuracy, always guarantee a reliable points calculation.

R1 Plus has been designed to hold out against rain and dust: the IP66 certification allows to go ahead with the survey even during hard rain. The body design is distinguished by its robust mechanical structure, and the high performance telescope, featuring 30X magnification and illuminated reticle, provide the best sighting quality in any lighting condition.

STONEX SURVEYING SYSTEMS

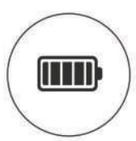
LONG DISTANCE MEASUREMENTS

Thanks to the high efficiency EDM, R1 Plus guarantees long distance measurements: 600 m in reflectorless mode and up to 5.000 m using a single prism, with millimeter accuracy.

FAST, ACCURATE, RELIABLE

Measuring distances in one second, with 2 mm accuracy, makes any job extremely cost effective and reliable. The wide range of application software allows to complete the Surveyor's tasks directly in the field.

3 DAYS OF FIELD WORK



The low power consumption circuit design and to the two high capacity batteries allow to continuously work for 26 hours and to measure over than 1.000 distances. The SD card up to 16 Gb can store an huge amount of data.

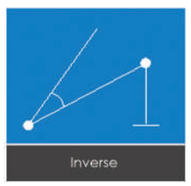
HIGH PROTECTION GRADE

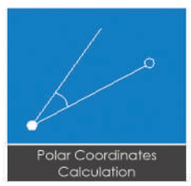
IP66 dustproof/waterproof rating ensures R1 Plus's high reliability in all weather conditions and allows to continue working even under very humid conditions and where sand and dust are present.

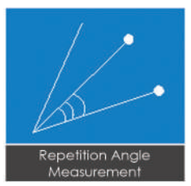
R1 PLUS

The most complete field software suite at your service

When the work is not limited to points collection R1 Plus becomes your portable equipment for COGO calculations and setting out of points, lines, roads. It's easy to calculate an area, the height of remote points, such as power lines and bridges, the accuracy of a traverse. More than 15 programs are available.

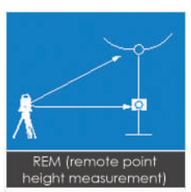

Inverse

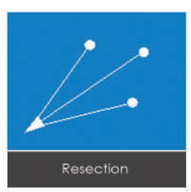

Polar Coordinates Calculation

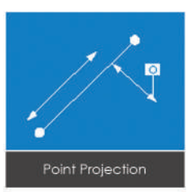

Repetition Angle Measurement

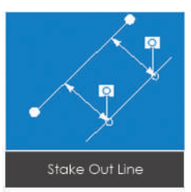

Arc Staking Out Measurement


Road Staking Out Measurement

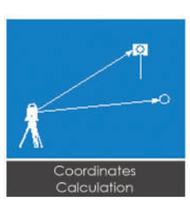

REM (remote point height measurement)

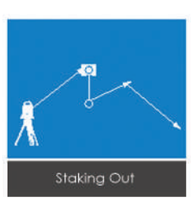

Resection

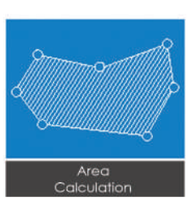

Point Projection

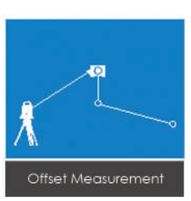

Stake Out Line

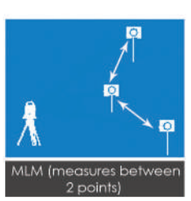

Traverse Surveying


Coordinates Calculation


Staking Out


Area Calculation


Offset Measurement


MLM (measures between 2 points)

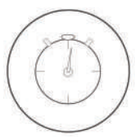
R15

The best companion of every surveyor

Stonex R15 Total Station, precise distance and angles measurements, concentrated in 5 Kg of pure technology.
The perfect tool whenever the topographic works require a light and fast machine, all day working thanks to 24 hours of continuous operating time.
The onboard field programs, included as standard, make R15 suitable for any construction site, cadastral, mapping and staking out, works.
The wireless Bluetooth connection allows to connect R15 with handheld computers giving the possibility to use a custom field software on line with the instrument.
No limitation for distance measurements, up to 5000 m with a single prism, 600 m reflectorless and 2" as angular accuracy, always guarantee a reliable points calculation.
R15 has been designed to hold out against rain and dust: the IP55 certification allows to go ahead with the survey even during hard rain.
The body design is distinguished by its robust mechanical structure, and the high performance telescope, featuring 30X magnification and illuminated reticle, provide the best sighting quality in any lighting condition.

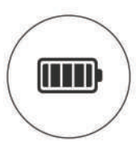
LONG DISTANCE MEASUREMENTS

Thanks to the high efficiency EDM, R15 guarantees long distance measurements: 600 m in reflectorless mode and up to 5000 m using a single prism, with millimeter accuracy.



FAST, ACCURATE, RELIABLE

Measuring distances in one second, with 2 mm accuracy, makes any job extremely cost effective and reliable. The wide range of application software allows to complete the Surveyor's tasks directly in the field.



3 DAYS OF FIELD WORK

The low power consumption circuit design and to the two high capacity batteries allow to continuously work for 24 hours and to measure over than 120.000 points. The SD card up to 16 Gb can store a huge amount of data.

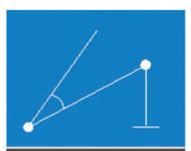
HIGH PROTECTION GRADE

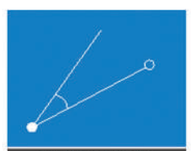
IP55 dustproof/waterproof rating ensures R15's high reliability in all weather conditions and allows to continue working even under very humid conditions and where sand and dust are present.

R15

The most complete field software suite at your service

When the work is not limited to points collection, R15 becomes your portable equipment for COGO calculations and setting out of points, lines, roads. It's easy to calculate an area, the height of remote points, such as power lines and bridges, the accuracy of a traverse. More than 15 programs are available.

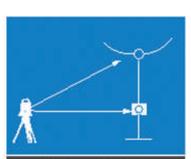

Inverse


Polar Coordinates Calculation


Repetition Angle Measurement

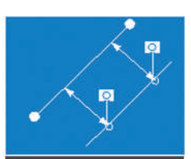

Arc Staking Out Measurement


Road Staking Out Measurement


REM (remote point height measurement)


Resection


Point Projection


Stake Out Line


Traverse Surveying


Coordinates Calculation


Staking Out


Area Calculation


Offset Measurement


MLM (measures between 2 points)

R25/R25LR High precision Total Station

High accuracy and long reflectorless range are the perfect combination that makes Stonex R25/R25LR the best friend of every professional surveyor.

Cadastral, mapping, staking out, and up to high precision monitoring works: within the range of R25/R25LR Series, you will find the solution that fits your needs.

R25/R25LR comes standard with integrated onboard field software, a complete suite of applications, and an external controllers can be linked to Stonex R25/R25LR, through the Bluetooth™ wireless connection: no limitation will stop your working process.

Stonex R25/R25LR features endless friction drives for continuous horizontal and vertical rotations: no more knobs and clamps with limited movements but a more comfortable use of the station. The trigger key on the side of the instrument allows you to start the measurement very easily.

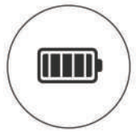
STONEX SURVEYING SYSTEMS

LIMITLESS DISTANCE MEASUREMENTS

By using digital phase laser ranging technology, R25/R25LR guarantees high accuracy long range measurements: 600/1000 m in reflectorless mode and up to 5000 m using a single prism, with millimeter accuracy.

FAST, ACCURATE, RELIABLE

Measuring distances in one second, with 2 mm accuracy, makes any job extremely cost effective and reliable. The wide range of application software allows to complete the Surveyor's tasks directly in the field.



ONE DAY OF CONTINUOUS FIELD WORK

Thanks to the low power consumption circuit design and to the two high capacity batteries R25/R25LR gives the opportunity to continuously work for around 13 hours. No concern for data storage: the improved 4 Gb internal memory and the SD card up to 16 Gb store a huge amount of data.

TEMPERATURE PRESSURE SENSORS

Temperature and pressure changes have a negative impact on the accuracy of distance measurements: the smart R25/R25LR monitors the changes and automatically adjusts the distance calculations.

R25/R25LR

The total station with endless drives

Whether the work is a basic survey or a long road staking out under full sun, R25/R25LR will always help you with a friendly user interface and its intuitive field software. The navigation menu drives the Surveyor into simple operations, and the results are displayed in a clear way.

ENDLESS FRICTION DRIVES & TRIGGER KEY

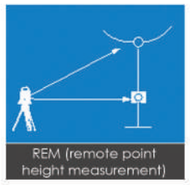
These features make R25/R25LR one of the most manageable Total Stations of the market: target collimations are fast and accurate using both the hands and the measure starts using the trigger key located on the same side of the instrument.

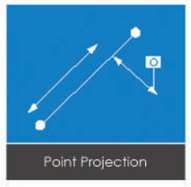
AUTOMATIC 2 AXIS COMPENSATION

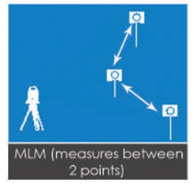
The electronic dual axis compensator featuring a wide range automatically levels R25/R25LR when it is not perfectly horizontal; the status of the compensator is shown on the graphic display allowing an accurate levelling of the instrument.

WIDE RANGE OF COMMUNICATION OPTIONS

Standard RS232 interface, mini USB, SD card up to 16 Gb, guarantee a seamless in/out data flow to any external device. The wireless Bluetooth connection allows to connect R25/R25LR with handheld computers giving the possibility to use a custom field software on line with the instrument.







R35/R35LR

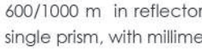
Fully customizable Total Station

Stonex R35/R35LR series is the most customizable Total Station of the market. Depending on the user needs, R35/R35LR comes with endless friction drives for continuous horizontal and vertical rotations, 2" accuracy and 600/1000 m reflectorless range.

This advanced Total Station is fully customizable: each user can choose the software that best suits own needs. Several onboard software to be choosen, such as Microsurvey FieldGenius, Carlson SurvCE, ANTAS Mobile and many Custom field applications.

In addition the TFT 320x240px touch screen display on both sides gives the Surveyor a clear, colourful and fully graphical environment, and the user friendly on board software supports the users with guided through functions for data collection, topographic surveys, staking out.

The high-precision class 3 EDM featuring millimeter accuracy even on long range distances, and the absolute encoders performing high precision angles measurements, provide reliable points calculation in every condition.



UP TO 600/1000 m REFLECTORLESS

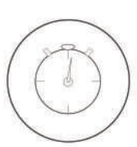
By using digital phase laser ranging technology, R35/R35LR guarantees high accuracy long range measurements: up to 600/1000 m in reflectorless mode and up to 5000 m using a single prism, with millimeter accuracy.

TEMPERATURE PRESSURE SENSORS

Temperature and pressure changes have a negative impact on the accuracy of distance measurements: the smart R35/R35LR monitors the changes and automatically adjusts the distance calculations.

CHOOSE YOUR FAVORITE ONBOARD SOFTWARE

By choosing R35/R35LR you are not forced to use the manufacturer software! A wide range of well known field software are compatible, and the user can even create his own application onboard.



FAST, ACCURATE, RELIABLE

Measuring distances and angles in one second, with 2 mm accuracy, makes any job extremely cost effective and reliable. The big touch screen graphic display facilitates the daily work in the field.

R35/R35LR

New with endless friction drives and trigger key

R35/R35LR model has been updated with endless friction drives (no more clamps and limited HOR & VERT rotations) and with a trigger key for more accurate measurements. R35/R35LR clear 30X telescope, with illumination adjustable reticle, provides superior sighting quality in any light condition, while the coaxial laser pointer gives a safe pointing to any point.

TRIGGER KEY & ENDLESS FRICTION

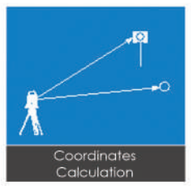
These features make R35/R35LR one of the most manageable Total Stations of the market: target collimations are fast and accurate using both the hands and the measure starts using the trigger key located on the same side of the instrument.

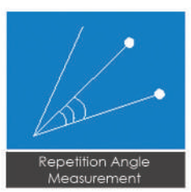
WIDE RANGE OF COMMUNICATION OPTIONS

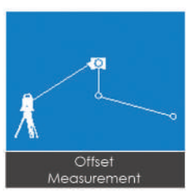
Standard RS232 interface, USB, mini USB, guarantee a seamless in/out data flow to any external device. The wireless Bluetooth connection allows to connect R35/R35LR with handheld computers giving the possibility to use a custom field software on line with the instrument.

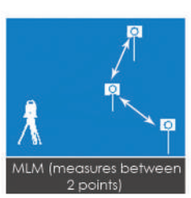
2 SIDES TOUCH SCREEN DISPLAY

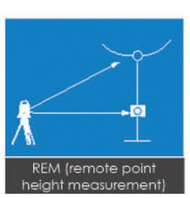
The clear TFT 320x240px 2 sides touch screen display gives the Surveyor a clear, colourful and fully graphical environment, and the user friendly on board software supports the Surveyor with guided through functions for data collection, topographic surveys, staking.











R80 The best solution for monitoring

Stonex R80 is a Motorized Total Station for classic jobs for survey and stakeout and perfect for high precision surveying areas, such as rail traffic monitoring, control of structures, bridges, dams and landslide areas.

R80 adopts up to date automatic prism recognition and positioning technology and has a high accuracy of 0.5"-1".
R80 has a distance measurement accuracy of 1 mm + 1 ppm (Prism) and a 1.000 m long range reflectorless distance measurement.

This advanced Total Station run Windows CE 7.0 operating system and each user can choose the software that best suits own needs. It supports also SDK and external control protocol for software developing.

R80 is the perfect solution for monitoring because through the remote control software is possible turning the instrument on and off and have a tool of survey management of difficult and complex areas.

STONEX SURVEYING SYSTEMS

HIGH PRECISION SURVEYING
Angle measurement accuracy 0.5"-1"
Distance measurement accuracy 1 mm + 1 ppm (Prism)

LONG DISTANCE REFLECTORLESS
By using digital phase laser ranging technology, R80 guarantees high accuracy long range measurements: up to 1.000 m in reflectorless mode and up to 5.000 m using a single prism, with millimeter accuracy.

BLUETOOTH LONG RANGE
Use R80 built in Bluetooth for medium range data transfer or its dedicated long range Bluetooth for highest performance over long distances.

HIGH QUALITY SOFTWARE
Windows CE 7.0 operating system. Supports SDK and external control protocol for software developing

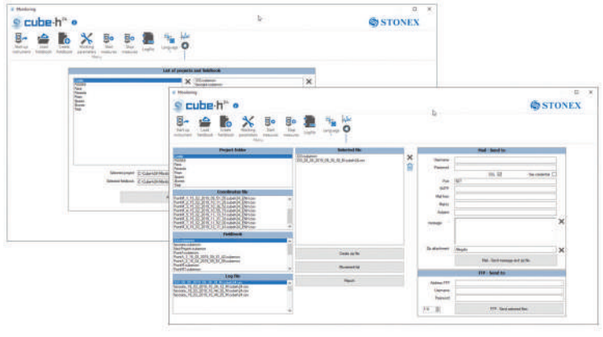



Cube-h^{24}
Windows Software

Cube-h^{24} has been designed to perform operations to check movements of points in natural places or artificial structures, considered to be at risk of stability. In general, the materialization of the points is made with prisms used for topography, in order to determine the real distances from a station point. It is however possible to use points marked on a reflecting surface.

Cube-h^{24} allows to:
- Set up surveys and calculation procedures, in order to compare the coordinates of the points subject to control in subsequent interventions
- Check either in real time or in scheduled time the displacements of the points

Main features:
- Cube-h^{24} is a vertical solution for monitoring with motorized TS
- TS communication management
- Project management
- Continuous or periodic acquisition
- Graphical reports of the results
- Alerts and alarms generated in a range of critical values defined by user
- Sending log files and alerts or alarms to office by FTP or email



R80 The best integrated solution for your survey

Stonex R80 is a Motorized Total Station for classic jobs of survey and stakeout.

R80 adopts up to date automatic prism recognition and positioning technology and has an high accuracy of 0.5"-1".
R80 has a distance measurement accuracy of 1 mm + 1 ppm (Prism) and a 1.000 m long range reflectorless distance measurement.

This advanced Total Station runs Windows CE 7.0 operating system and users can choose the software that best meets their needs. It supports also SDK and external control protocol for software developing.

R80 OnePole Solution can be managed by switching from a TS to GPS method in a single solution thanks to Cube-a Software which is able to control every part of the survey.

STONEX SURVEYING SYSTEMS

HIGH PRECISION SURVEYING
Angle measurement accuracy 0,5"-1"
Distance measurement accuracy 1 mm + 1 ppm (Prism)

LONG DISTANCE REFLECTORLESS
By using digital phase laser ranging technology, R80 guarantees high accuracy long range measurements: up to 1.000 m in reflectorless mode and up to 5.000 m using a single prism, with millimeter accuracy.

BLUETOOTH LONG RANGE
Use R80 built in Bluetooth for data transfer or to control the TS remotely.

ANDROID CONTROLLER
You have complete control of the TS thanks to a Controller with Android on board and a powerful Software like Cube-a

OnePole Solution
TS+GPS with Cube-a Software

OnePole Solution combines the millimeter positioning accuracy of a prism measurement with the advantage of measuring points not visible from the TS through the GPS Receiver.
A total station needs local control points on which it can be set. These points must be visible from the station and therefore the line of sight has to be free of obstacles.
An RTK GPS receiver can determine its position in seconds with centimeter level accuracy using data from satellites.
The ability to combine and use both systems simultaneously greatly improves surveying efficiency.

Advantages of the system:
- The OnePole Solution allows you to work simultaneously with TS and GPS
- TS and GPS (and diastimeter) can be simultaneously connected to the controller using Bluetooth
- Change the measurement mode from TS to GPS by one simple tap on the always accessible switch button
- Reduce prism search times through auto aiming to the current GPS position
- Easily setup your TS position by Station On Point and Free Station/Resection programs
- View on Google Maps your TS and GPS surveys

OnePole

TOTAL STATIONS

Product Comparison

	 R1 Plus	 R15	 R25/R25LR	 R35/R35LR	 R80
Angle Accuracy	2"	2"	2"	2"	0.5"-1"
Prism measurement	5.000m	5.000m	5.000m	5.000m	5.000m
Prism accuracy	2mm+2ppm	2mm+2ppm	2mm+2ppm	2mm+2ppm	1mm+1ppm
Reflectorless measurement	600m	600m	600m/1.000m	600m/1.000m	1.000m
Reflectorless accuracy	3mm+2ppm	3mm+2ppm	3mm+2ppm	3mm+2ppm	3mm+2ppm
Display	2 LCD	2 LCD	2 LCD	2 Color touch	2 Color touch
OS	Proprietary	Proprietary	Proprietary	Windows CE	Windows CE
Bluetooth	NO	√	√	√	Long Range
USB	√	√	√	√	√
RS232	√	√	√	√	√
Memory	120.000 points	120.000 points	4Gb	4Gb	4Gb
Guide light	NO	NO	NO	√	√
H-V movements	Lock drives	Lock drives	Endless drives	Endless drives	Motorized
Operation time	24 hours	24 hours	12 hours	9 hours	6 hours
Operating temperature	-20° +50°	-20° +50°	-20° +50°	-20° +50°	-20° +50°
Protection class	IP66	IP55	IP55	IP55	IP55

LASER SCANNERS

3D scanning everywhere

STONEX Laser Scanners are the best solution for any application, balancing economic efficiency and highly accurate outputs.
The sealed external case of all our scanners allows you to operate in dusty and humid environments, where others fail.

F6

F6SR

X300

X300 Simple, tough, accurate

The right tool for your daily work

STONEX X300 is a 3D Scanner designed to deliver effective results every day, on any project.

It's ease of use, reliability, flexibility and reasonable price make it your perfect work companion.

X300 has a dedicated line of accessories:
- Monitoring kit
- Camera Kit
- X300 Framework
- Gps Kit

RUGGED DESIGN
The fully sealed case protects your inversion making it possible to get the job done where others fail, regardless of dust, humidity, heat or bumps.

EASE OF USE
Push one button and control X300 with your smartphone or tablet. Laser scanning has never been easier.

RETURN ON INVESTMENT
X300 balances the performance you really need in a wide range of applications with a reasonable price.

EXPANDABLE
A complete set of accessories provide flexibility in any environment.

MADE IN ITALY
A clean effective design for your daily work.

Native Software

Open File Manager
If you are using CAD, crime scene, car crush analysis or other 3rd party software, you can now load the point cloud data collected with X300 directly into your workflow.

Accessories

MONITORING KIT
External Power Supply with Ethernet cable control to operate remotely the scanner in monitoring projects.

GPS KIT
Kit designed to connect the GNSS receiver to the X300 Laser Scanner. The easiest way to georeference your 3D data.

X300 FRAMEWORK
Expand the field of view and scan ceilings and tunnels.

CAMERA KIT
Install a DSLR camera to apply high resolution images to your scans

F6/F6SR 3D handheld scanner

Volumetric Scanners tor Field Use

STONEX F6 and F6SR are the market leader 3D handheld scanner for fast scanning.

With Stonex F6 you can scan big objects and large areas from short to far ranges.

The F6 Short Range (SR) instead is designed especially for accurate and fast scanning of highly detailed small objects, positioned in close proximity.

Based on a patent algorithm of innovative encoding F6 and F6SR provide superb quality of data making them the ultimate devices for scanning complex scenes within seconds.

F6 Handheld Scanner

3D Volumetric Scanner tor Field Use

STONEX F6 is a market-leading 3D Portable Scanner for fast scanning of medium to large objects.
The fields of application of F6 are many: archeology, architecture, cultural heritage, facilities management and forensic investigations.
STONEX F6 is managed by Echo, an easy-to-use integrated software with advanced features such as:

- Scanning mode with real-time feedback
- Powerful 3D data editing tools
- Advanced texture meshing
- Composition of models from different scans
- Multiple interfaces: tablet / laptop / VR

Advantages of F6 and F6SR

- IR light: allows you to work in any lighting condition, from complete darkness to daylight
- Accurate and fast
- Ergonomic handle
- No scene preparation: the geometry is deciphered by the encoding
- 2-level operating mode: static and dynamic
- Accessibility to hidden places
- Hot shoe connection:
  - Wireless synchronization of multiple F6 Scanners for the acquisition of objects in dynamic movement
  - Flash or continuous light
- Easy to use: professionals will be able to manage the system with ease after a brief training
- Unique and lightweight design

Requirements for Computer / Tablet*:

- Win 8.1 Pro and later versions
- i7 quad processor
- 16 GB memory
- 256 GB storage memory

* not included

F6SR Short Range Handheld Scanner

A 3D volumetric handheld scanner for highly detailed scans of minimal size objects

F6 Short Range (SR) has been designed specifically for the accurate and rapid scanning of small, very detailed objects, positioned a short distance away. F6SR is the perfect scanner for scanning objects with archaeological value and rich in details.

3D Software

Process your data

Powerful software at your disposal

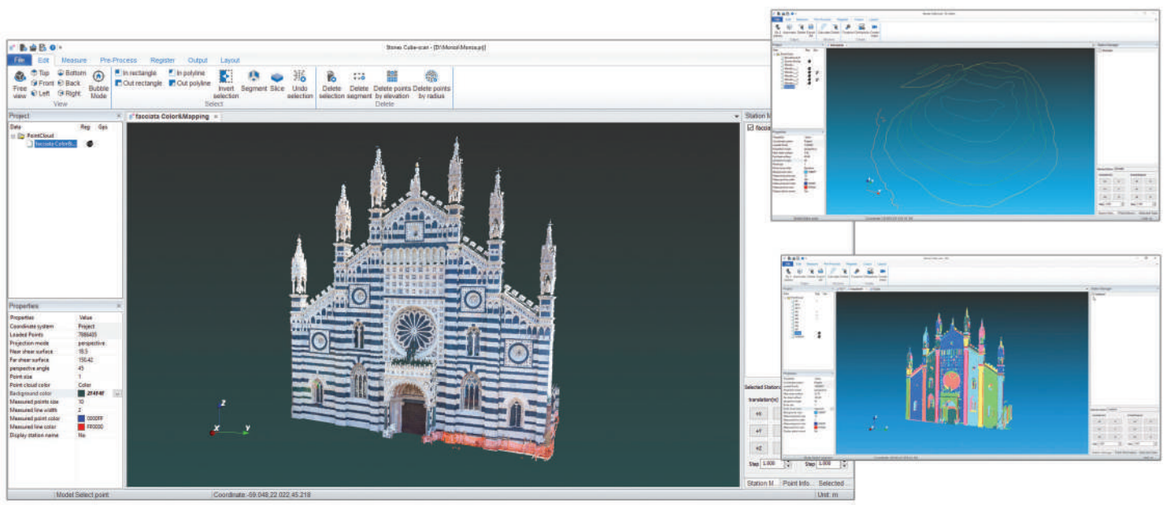
Stonex Reconstructor and Cube-scan are powerful desktop software for Point Cloud data processing.
Point Clouds can be imported, filtered, registered, edited, using a wide range of tools.
Usability, straight forward User Interface and a powerful 3D engine allow to handle the most complex projects and to easily extract information, such as: basic measures, elevations, areas, contour lines, orthophotos, flythrough videos, and more. All that outcomes can be exported and used in your own software.
They can import Stonex proprietary point cloud format as well as most common 3D data formats and they can combine models from different sensors, by using a variety of registration tools.

Cube-scan

Easy to use and versatile

Cube-scan is part of Stonex Cube-suite.
Easy to use and learn, it allows basic 3D workflows. Import point clouds from Stonex scanner or different sensors and clean them through selection tools.

Aligns the point clouds by choosing from a variety of registration modes. Export registered point clouds to work with your own software or process measures, contour lines, edges and orthophotos.



Stonex Reconstructor

Powerful and usable 3D Software

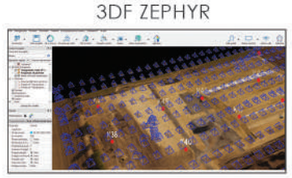
Stonex Reconstructor software will guide you through a complete and clear workflow with expandable modules suited to your needs.
SURVEY module is the core element with importing, registering and processing features.
CONSTRUCTION module adds additional advanced features for BIM and Construction applications like solid fitting, As Built or planarity checks.
MINING module is specific fo quarries, mines and excavations. It offers advanced calculation of volume/cut&fill volume, topographic mesh (DTM) and specific tools for tunnel analysis.

MAIN FEATURES

LINE UP
CLOUD TOOLS
MESH & SHAPES
INSPECTION TOOL
PLANARITY/VERTICALITY
COLOR TOOL
ORTHOPHOTO
CAD OUTPUT
MEASUREMENT

INTEGRATIONS WITH OTHER SOFTWARE

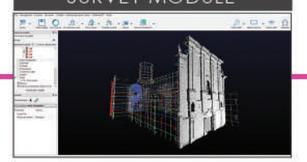
3DF ZEPHYR



Complete solution for 3D photogrammetry reconstruction data.

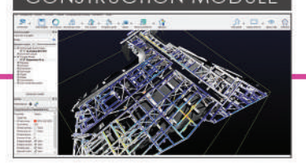
MODULES

SURVEY MODULE



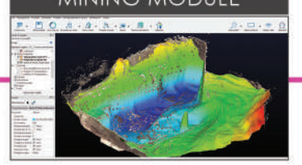
All the Cloud management tools in one application.

CONSTRUCTION MODULE



Advanced features for BIM, Architecture and Construction.

MINING MODULE



All you need for quarries, cut&fill volumes, excavations, DTM.

COLOR & MAPPING MODULE

Use your own high resolution camera to color the scans.

Special Projects

GPS solutions for high precision works

The new construction world demands technologies that are able to monitor and assure the correct workflow, requested by the project specifications.
STONEX Special Project team, has a deep knowledge in developing tailored solutions, in order to improve the jobsite productivity keeping in first place the operators' safety. With Special Project Solutions the job site will be lived like a new comfort zone from all the actors: from the operators to the supervisors.
The application fields where the new guidance solutions are developed are: Marine Guidance Systems, Precision Farming, Mining and Foundation, Solar Farm.

STX-PLANT

STX-MARINE

STX-SUITE

STX-DRILL

SPECIAL PROJECTS

Construction & Machine Control

STX-SUITE

STX-SUITE is a handy and prompt system for the design of ground photovoltaic plants and the on field positioning of the pile driver machines.

STX-SUITE allows the planning of the best piling pattern directly on the field (survey with GPS + tablet + integrated software), as well as the loading of existing CAD projects (.dwg, .dxf).

Centimeter accuracy positioning is provided by two Stonex GPS receivers (up to 20Hz), installed on a metal frame integrated in the pile driver machine structure.

PROJECT AND DESIGN

The SOLAR PLANT Project can be generated, importing the local coordinates from different formats (DXF, TXT). A TARGET POINT file will be produced for the GPS navigation purpose.

SURVEY STAKE-OUT

STX-SUITE is a quick and smart stakeout GPS solution made for any kind of operator. A clear guidance layout aids the operator to find the post position with centimetres accuracy.

MACHINE GUIDANCE

STX-SUITE fits on any kind of piling machines, drives the operator on the target point (post coordinates) in manual and automatic mode.

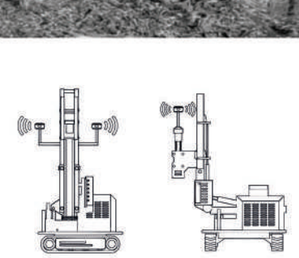
AUTO LEVELLING

A slope sensor with an hydraulic interface can be installed on any machine in order to assure always the best levelling accuracy of the mast along two axis.

ROI

Adopting STX-SUITE solution means reducing production costs. Less operators with high productivity.

STX-SUITE

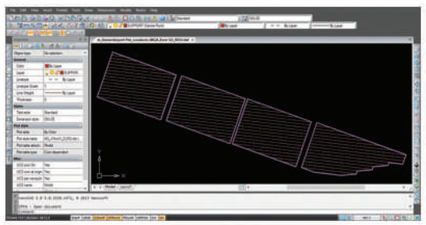


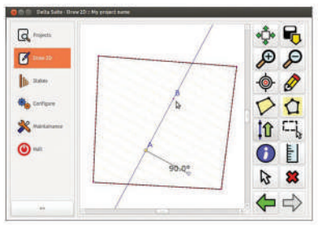
GPS satellite technology for piling of metal structures in ground photovoltaic plants

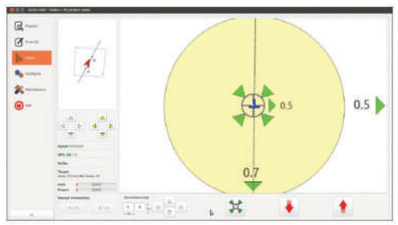
Two steps make up the Stonex solution for guiding and GPS positioning of photovoltaic plants:

- Survey and Design:
  Preparing the project in the office and importing the files on the tablet (.dwg or .dxf format).
  Alternatively, it is also possible to create the project directly on the field, by surveying the orientation points with GPS and tablet.
- Guide and Positioning:
  Guide the pile driver machine and align it to the row-blueprint by simply following the tablet indication.

STX-SUITE software is specifically designed for this kind of applications and allows elaborating the survey data (stored with GPS), and create the site project in a very quick and effective way. The double GNSS receivers system installed on the pile driver machine allows defining the right-left orientation and the guiding direction of the machine with respect to the reference pile. STX SUITE guides the machine on the exact position, by showing bearings and direction on the tablet. A biaxial inclinometer can help defining the vertical position of the stake during the driving process. Users have to simply align the machine along the direction of the row and adjust the reference mark (on the position of the virtual pile). When the machine position falls within the predefined tolerance, the guiding elements will turn green.







SPECIAL PROJECTS

Construction & Machine Control

STX-DRILL

STX-DRILL is a GPS guidance system for jet grouting capable to determine the correct planimetric position of the columns, the verticality of the drilling tower and the deviations from the designed coordinates.

STX DRILL guides the operator straight to the designed coordinates thanks to the easy and intuitive user interface. It is only required to drive the machine and match the head and tail edges of the pole against the crosshairs displayed on the screen.

Once the placement is finished, the system provides the exact excavation depth to be reached.

PROJECT AND DESIGN

The Project can be generated, importing the local coordinates from different formats (DXF, TXT). A TARGET POINT file will be produced for the GPS navigation purpose. The Project coordinates include the depth and the tilt information.

MONITORING ACTIVITY

Thanks to a remote connection it is possible to monitor the progress of the work and update the projects in real time.

MACHINE GUIDANCE

Manual positioning of the probe on the post is no longer required, the operator is guided directly to the designated drilling spot in a precise, easy and faulty-free way. Each function can be controlled through a display installed on the rig.

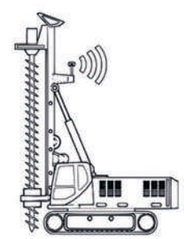
VISUALIZATION AND STORAGE

Thanks to STX-DRILL it is possible to assess and store the position of the drilling point, to verify the vertical/ slanted position of the probe, the exact beginning, final position of the treatment, the points made and those still to be treated.

ROI

Adopting STX-DRILL solution means reducing production costs. Less operators with high productivity.

STX-DRILL

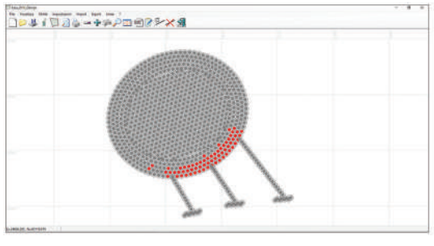


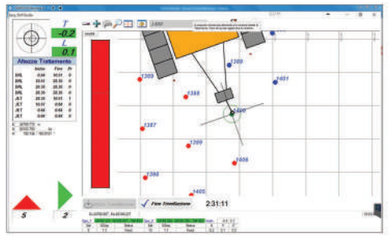
Satellite technology for high precision Jet Grouting works

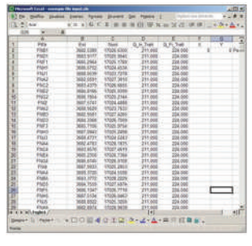
The STONEX SATELLITE GPS positioning solution for the Jet-Grouting is divided into two operational steps: Office Job & Field Job.
The project data processed in the office can be shared in real time with all operators on the jobsite using a Google Cloud Storage, a storage service based on the Cloud that allows you to store and access data easily on Google's infrastructure. The data received from the GPS antennas are transmitted through Wi-Fi to mobile devices (smartphones, PDAs or tablet). The hole coordinates are recorded and can be displayed on the map in text and graphics format. Import Format: DXF or TXT.

Advantages

- Abandonment of the manual method to place the probe on the picket;
- It guides the operator directly on the project drilling point with centimetric accuracy, in a simple and fast way;
- Control of all functions through a display mounted on the drill;
- Checking of the verticality probe;
- Exact depth of drilling start and end;
- Reduction of manual errors in the positioning procedure;
- Record and store all data during the work in special Reports file shared on Cloud.







SPECIAL PROJECTS

Precision Farming & Agriculture

STX-PLANT

STX-PLANT is a GPS driving system for planting machines of any kind.

Thanks to a dedicated software and a machine remote control, it allows to deliver centimeter accuracy when putting the plant (vine shoot, olive, hazel) in the right place at a given distance along the row.

The STX-PLANT Software allows to survey and design the project layout right on the job site.The program allows to define the shape of the row: linear, fan and curved shapes.

Planting can be done in the two directions of travel and it is not required to drive at constant speed, since the STONEX GPS data rate can check the plant positioning in real-time.

PROJECT AND DESIGN ON THE FIELD

Design the planting layout directly on the field thanks to the integrated design software.

SURVEY STAKE-OUT

Adapt the planting layout to the elevation profile of the field. Smart stake-out with auto-lock.

MACHINE GUIDANCE

Easy guide of the tractor over the designated points following the direction provided by the display.

HIGH ACCURACY

High accuracy positioning of the plant shoot.

ROI

Adopting STX-PLANT solution means reducing production costs. Less operators with high productivity.
Our solution is effectively and profitably used in viticulture, fruit growing, olive growing and in nurseries.

STX-PLANT

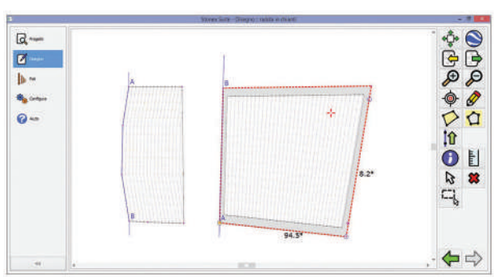
GPS technology for planting machines drive and control

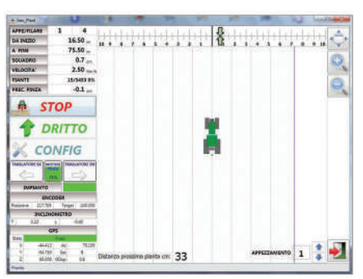
STX-PLANT can also adapt to different kind of planting jobs. Thanks to the flexibility and ease of installation (WIRELESS) it can be installed onto drilling machines for planting hazel, olive and almond trees.
The field operator only has to follow the driving reference line on the display and perform the hole once the auger reaches the plant position (yellow area on the display).

System components

STX-PLANT solution is made by:

- N.1 Stonex GPS receiver with differential correction capability (Ntrip or UHF Base station);
- N.1 Tablet Rugged (OS Windows);
- N.1 Control unit for the automation of the hydraulic controls of the planting machine;
- Hydraulic engine and rotary encoder for the control of the clamp;
- Software for design, stake out and job report.





SPECIAL PROJECTS

Marine

STX-MARINE

STONEX offers flexible, high-performance positioning systems to meet the unique needs of marine construction on both simple and complex projects.

Our solutions include both hardware and software, and can be easily integrated into third-party systems. Improve productivity and efficiency in underwater marine construction applications including dredging, crane operations, piling and hydrographic survey.

STX-MARINE provides accurate 3D visualization to assist the operator with underwater construction tasks.

Our systems are suited for dredging operations, canal/port development, land reclamation and breakwater/revetment works.

REAL TIME VISUALIZATION

Real-time visualization of the bucket/dredge head related to the design in plant, profile (2D) or 3D improves productivity and reduces rework and over-dredge.

LARGE GRID MODELS

Large grid models make it easier to visualize differences between current and project status. Rugged large display for ease of use and personalization.

REAL TIME UPDATES

Improve accuracy and speed with bathymetry data providing real-time updates on materials unloading or extraction. Reworkings to be carried out is drastically reduced.

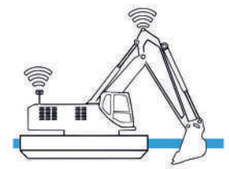
HIGHLY CONFIGURABLE

Highly configurable to suit endless machine/vessel configurations. Wide room for different applications including basic excavation, dredging, piling and revetment works.

EASY WORK

Easy-to-create volume calculations and reports reduce the need for operators to request office processing. Multiple view and configuration tailored to suit your requirements.

STX-MARINE



Flexible, High-performance Positioning Systems

STX-MARINE sensors support a range of marine construction workflows including:

Dredging

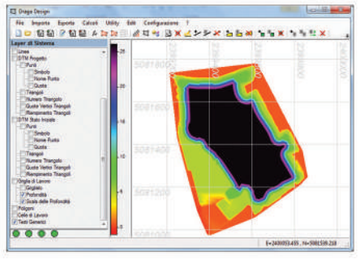
- Cutter Suction Dredger
- Bucket Dredger
- Backhoe/Excavator Dredger
- Grab/Clamshell Dredger

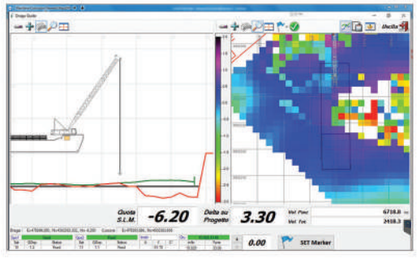
Placement

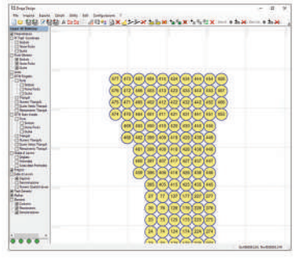
- Rock Dumping and Placement
- Caisson Placement
- Block Placement using Wire crane or Excavator
- Vertical and Raked pile placement

Benefits

- 3D full color process map
- Icon driven menu
- Zoom to improve visibility of work area
- Monitor bucket position in real time on target indicator
- Stakeout function provides guidance







STONEX

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