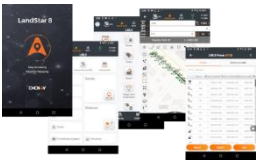
iGage

GNSS, Handheld SLAM, UAV, Marine Survey

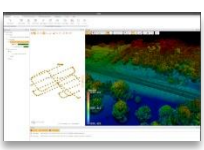












SG7

The best under-canopy GNSS performance - period

The best under-canopy performance: the SG7 is the fastest fixing, most reliable GNSS receiver available. The SG7 beats every other competing receiver under heavy canopy and in the open. With the best price.

We are ready to prove performance to you.

A Complete Receiver: 34-hour operation; 25% per hour fast charging; built-in 4G LTE cell modem; 2-watt transmit, high-sensitivity UHF radio; high-speed 5 GHz Wi-Fi and Bluetooth control.

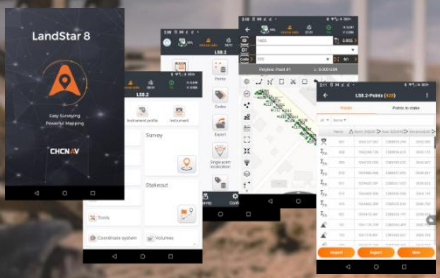
Bright front panel display: View receiver status at a glance, mode configuration, enable and verify RINEX recording from the front panel.

iGage support and service: ask our customers, iGage supports and services the equipment we sell.

Financing: 3.99% factory financing is available (OAC).

SG7 Single Receiver Base or Rover 	~~$ 7,990~~ $ 6,320
SG7 Network Rover Kit 	~~$ 10,034~~ $ 8,360
SG7 Complete Base Rover Kit 	~~$ 18,024~~ $ 14,680

LandStar 9 2026 Edition



Land Surveying and Mapping Field Software for Android

Easy to learn, easy to use, powerful features. Tuned for USA workflows.

Works with all CHC, SG and iG Standard, Visual and Point-cloud receivers.

Perpetual license with no-charge updates. LandStar 8 licenses automatically update to LandStar 9 at no additional cost.

High speed MetaCAD engine renders massive drawings (DWG, DXF, XML) quickly.

Codeless or code driven linework. Field to finish compatible.

The iGage printed User Manual is provided with every LS8 license.

LandStar 9 GNSS		$ 790
LandStar 9 GNSS + Tripltek 9 Pro tablet w/ bracket		$ 2,044
LandStar 9 GNSS + iGT68 controller w/ bracket		$ 1,750

Visual SG20AR

Visual Palm-sized GNSS

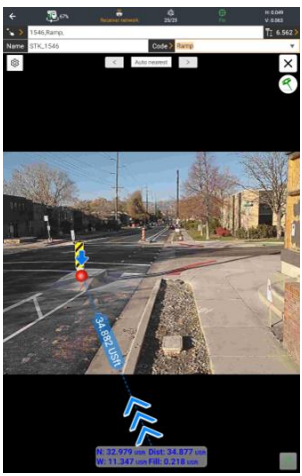
The SG20AR Palm Visual RTK is a lightweight receiver combining:

- Highest performance GNSS
- 200 Hz 5th Generation 60% tilt IMU
- Dual highspeed synchronous cameras
- Highspeed augmented reality visual stakeout
- Lightweight 1 lb., small 4.2" diameter
- High capacity 17-hour internal battery
- High sensitivity internal UHF radio

Combined with LandStar, stakeout efficiency is doubled with instant target display and full background CAD overlays.

The 4th generation air stacked GNSS antenna provides best-in-class GNSS performance under canopy and in the open.

The lightweight, small size greatly reduces operator fatigue with no loss in GNSS performance.



Visual Stakeout

Best of all, iGage brings this receiver to you at a groundbreaking price.

SG20AR dual camera pocket receiver		$ 6,990
SG20AR + SG7 Complete Base Rover Kit dual camera pocket receiver, SG7 base, Android collector, LandStar		$15,354

Sale Price $ 8,568

1408	With the latest 1408-channel GNSS modules tracking GPS, GLONASS, Galileo, BeiDou, QZSS these receivers match the under-canopy performance of the SG7.
200 Hz	200 Hz IMU's automatically initialize almost instantly when the head moves a few feet with a Fixed solution. There is no need to rock the pole or perform any complicated initialization maneuver.
25 FPS	25-frame per second high-speed, 5- and 2-million-pixel, low light global shutter cameras drive visual integration. Visual Stakeout saves crew effort and time. Visual Surveying allows measurements from afar, without revisiting a project.
9/16 Hours	Battery life, low weight, small size, quick Time-to-Fix, and greater measurement stability make these receivers the best Visual GNSS devices we have ever offered.

	SG20	SG6
Forward facing camera	2 MP	5 MP
Downward facing camera	2 MP	2 MP
Visual Stakeout	✓	✓
Visual Survey	×	✓
Price	$6,990	$8,568

eBase

5-watt RTK GNSS Base

The eBase 5-watt UHF GNSS station is a purpose built, all-in-one Base station with two extra-large 7,000 mAh 7.4 V, door accessible batteries.

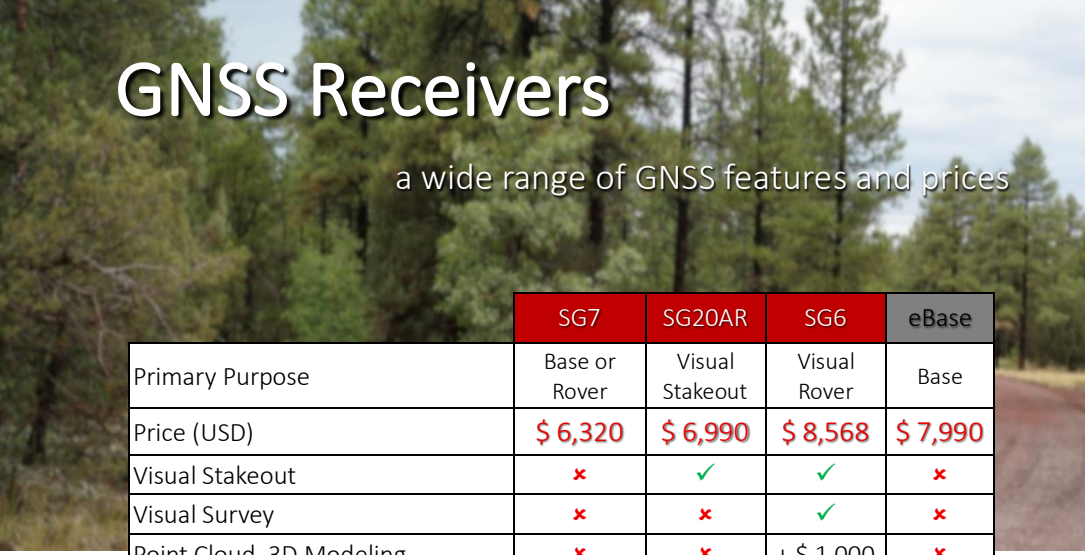
Providing 12-hours of 5-watt base transmissions without external cables and batteries, the eBase greatly simplifies UHF Base setup.

An E-Bubble tilt sensor warns when the base is inadvertently moved.

The eBase also includes a 4G LTE modem for transmitting GNSS corrections to APIS, a TCP/IP server or connecting to a network server allowing for a network based initial Rover position.

The 1,408 channel UM980 OEM engine matches the SG6, SG7, SG20AR, ViLi 100 receivers.

Price	$ 7,990
Tracking	GPS L1C, A, L2P Y, L2C, L5 GLONASS L1, L2, Galileo E1, E5a, E5b, E6 BeiDou B1I, B2I, B3I, B1C, B2a, B2b QZSS L1, L2, L5, L6; PPP B2b-PPP; SBAS L1, L5
UHF Radio	450-470 MHz, 5-Watt, Transparent, TT450, Satel 3AS
Tilt sensor	Movement detection
Included	Swiss style tribrach w/ adapter, 30 cm extension pole, charger
Ports	7-pin Lemo: Power + RS232 Serial
4G LTE Modem	EG25 LTE Cat-4 FDD in bands 1,2,3,4,5,7,8,12,13,18,19,20,25,26,28



GNSS Receivers

a wide range of GNSS features and prices

	SG7	SG20AR	SG6	eBase
Primary Purpose	Base or Rover	Visual Stakeout	Visual Rover	Base
Price (USD)	$ 6,320	$ 6,990	$ 8,568	$ 7,990
Visual Stakeout	✗	✓	✓	✗
Visual Survey	✗	✗	✓	✗
Point Cloud, 3D Modeling	✗	✗	+ $ 1,000	✗
IMU Tilt compensation (Hz)	✓ 200	✓ 200	✓ 200	✗
Max Tilt Angle	60°	60°	60°	
Internal Cellular Modem EG25 4G	✓	✗	✗	✓
Type C Data/Charge Port	✓	✓	✓	✗
7-Pin LEMO RS232, 9 to 28 VDC for Ext Power, Ext Radio	✓	✗	✗	✓
Display Screen	OLED + 2 LED	2- LED	4- LED	OLED + 2 LED
UHF Radio Tx Power (watt)	2	1	1	5
UHF Antenna Connection	TNC	SMA-F	TNC	TNC
Bluetooth®	4.2	4.2	4.2	4.0
Wi-Fi 802.11 AP mode	2.4G bgn	2.4G bgn 5G ac	5G ac	2.4G bgn
Data Storage for static	8 GB	8-GB	8 GB	8 GB
Front camera	✗	2 MP	5 MP	✗
Bottom camera	✗	2 MP	2 MP	✗
RTK run time (hours)	Rover 34 Base 16	Rover 17 VisStk 10	Rover 16 VisStk 9½	Base 12
Included accessories case, UHF antenna, SHM bar, charger, USB cable, ✓ 2-m CF prism pole	✓	✓	✓	tribrach
GNSS Engine (1408 ch)	UM980	UM980	UM980	UM980
Weight (lbs)	2.54	1.00	1.65	2.54
Size (W x H inches)	6.0 x 3.1	4.2 x 2.1	5.2 x 3.4	6.3 x 4.1
Environmental Rating	IP67	IP68	IP68	IP68
Warranty (years)	1	1	1	1

Tripltek 9 Pro

the brightest field tablet available

The brightest display, highest performance tablet available. Sustained brightness- will not dim in direct sunlight. Over three times brighter than other mobile devices.

Ultra-Bright 1300 cd/m: best in class.

Operates in direct sunlight, no dimming, no overheating.

4K Ready High-Resolution Display.

High Color accuracy with wide Gamut.

Polarized screen for operation with polarized glasses.

Glove and wet touch screen. Works in the rain, even with pooled water on the screen.

12,200 mAH battery, 8-hour life at maximum brightness, fast 3.5 hour charging from 1%.

Tripltek 9 Pro includes bracket, adjustable arm, pole clamp 	$1,255
Tripltek 9 Pro w/ LandStar8 Bundle includes bracket, adjustable arm, pole clamp, LandStar8 GNSS 	$2,044

Price: $ 2,305

Selectable Output Power: 5, 20, 35-Watts.

Configurable as cable-connected External Radio or a Store and Forward Repeater.

410 to 470 MHz range, 25KHz or 12.5 KHz Channel Bandwidth.

Supports common protocols:

- Transparent EOT FEC on, FEC off
- Trimtalk™ / TT450S
- Trimmark3™
- Satel™ FEC on, FEC off

32-channels, front panel selectable

Built-in Voltmeter displays battery status.

Bail hook hangs on tripod, metal carry handle will not crack.

Industry standard Power / IO and UHF connections.

TNC-Female UHF Antenna Port.

Ports are protected from physical damage.

Complete kits include:

- radio
- high-gain antenna
- programming cable
- USB-to-Serial adapter
- User Manual

Optional external Y cables for most receivers:

- CHC, iGage, Trimble, Ashtech, Javad, Topcon, Carlson, GeoMax, Stonex, Spectra, Hemisphere, UniStrong, E-Survey, FOIF, Genec

Low voltage shutdown

IP67 water dust proof

Programming Tool

1-Year iGage Warranty

LT800H

Reasonably priced RTK GIS Tablet

Professional Android tablet with built-in survey grade UM980 RTK engine for precision data collection, forensic mapping, environmental surveying, blue stake locates and landscaping.

Add an external antenna and a pole for survey-grade sub-cm vertical accuracy.

Featuring a high performance 1408-channel GPS + GLONASS + Galileo + BeiDou UM980 GNSS module with best-in-class tracking. The LT800H delivers centimeter accuracy in the most challenging environments.

The built-in Quectel EG25-G LTE modem provides seamless connectivity to RTK correction network services and GIS database backends.

The LT800H Android RTK tablet is IP67 to withstand harsh environments and adverse weather conditions, ensuring that data is always safe wherever it is collected.

Works great with ESRI Field Maps®, any Android app and LandStar9.

With a 9,000 mAh Li-ion battery, the LT800H provides 8 hours of battery life allowing mobile crews to focus on collecting data without interruption.

LT800H	LT800H RTK Tablet Kit; LT800H Tablet, Data Cable, Helix Antenna, Power Adapter, Stylus	$2,490
LT800H+LS9	LT800H RTK Tablet Kit; …; with LandStar9	$3,280
External Cable	LT800H Antenna Cable	$ 120
External Antenna	HX-CSX627A External Antenna	$ 350

Apache 3 & 4 Boats

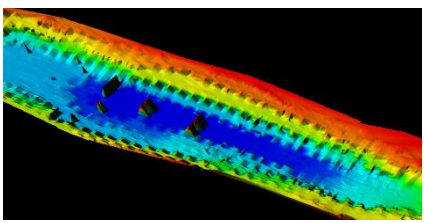
The Apache 3 Pro is a compact, high performance marine Uncrewed Survey Vessel (USV) with a built-in D270 single beam echosounder, precision GNSS and high-speed IMU technology for a wide range of autonomous and manual hydrographic survey applications.

The Apache 4 is a larger boat, featuring the built-in D270 echo-sounder with room for an additional ADCP or multibeam echosounder.

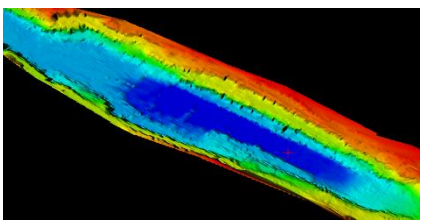
D270 Single Beam Echo Sounder:

- Temperature compensated to improve accuracy.
- Sounding range: 0.5 to 650 feet (ideal conditions)
- Sounding accuracy: 0.03 feet + 0.1% * Depth, at 100' depth = 0.13'
- Frequency: 200 kHz

Internal IMU: High-speed IMU is used to correct for vessel attitude (pitch and roll):



Before correction



After correction

Complete APACHE3 Pro USV kit with Android controller and all software and training	$ 39,990

SLAM Perspectives

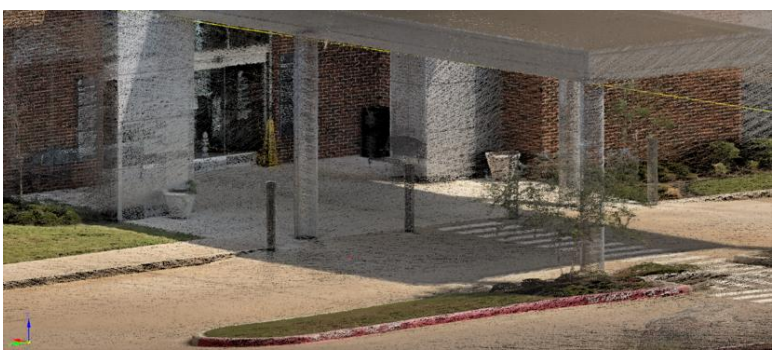
Practical Use of New Technology

To say that **every** survey crew will be equipped with a SLAM scanner in the next five years is not an exaggeration. SLAM (**S**imultaneous **L**ocation **a**nd **M**apping) sensors have existed for several years, but with significant costs and limitations.

Today, the RS10 offers easily implemented endless capability that is affordable for any surveyor.

Ultimately the RS10 is a LiDAR scanner that is used on the ground collecting data on-the-fly rather than from fixed positions like traditional terrestrial scanners. It accomplishes this by integrating multiple positioning technologies.

This means that a large, complicated structure can be scanned in literally a few minutes (examples below), rather than from multiple setups. In some ways it is like UAV (drone) surveying, except it is from the ground instead of from the air.

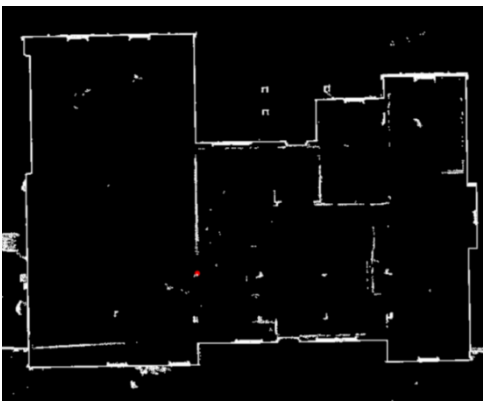


Comparing SLAM scanners to UAVs, I have concluded that a SLAM scanner can be used in more scenarios with greater potential for a return of investment over a UAV:

- SLAM scanners gather data from a different perspective (ground based) which allows for more precise locations of buildings and other vertical structures, including indoors and outdoors
- SLAM scanners do not require an FAA Part 107 license
- SLAM scanners are not sensitive to windy conditions
- SLAM scanners do not have the same level of liability (e.g. they don't fall out of the sky or fail to return)
- SLAM scanners provide better precision (2-4cm in most cases with good procedures)
- SLAM scanners are extremely easy to implement- field training can be done in minutes
- SLAM scanners do not require the same degree of pre-planning

I've personally used the RS10 in my own survey practice over the past six months in countless applications and numerous sites. I've located:

- Buildings (3-20 minutes)
- Cemetery grave markers (700 graves in one hour)
- Corral fencing and other complex fenced areas.
- Interior partition walls of department store buildings (less than one hour)



- The awning and gas pump islands of a gas station (less than ten minutes)
- Curbing and edge of pavement, including ramps for ADA compliance
- Power line towers (2-3 minutes per tower)

- Inverts on sanitary sewer man holes and storm sewer boxes
- 50’ tall, elevated sign (2-3 minutes)
- Features on complex industrial sites with limited access
- Parking striping

Buildings as complex as a shopping center or as simple as a four-sided shop can be located in the time required to walk around the site twice, clockwise and then counterclockwise.

A typical residential lot can be scanned in about five minutes; fully collecting the building, power poles, overhead utility lines, fences and pavement features: sidewalk, driveway and curbing.

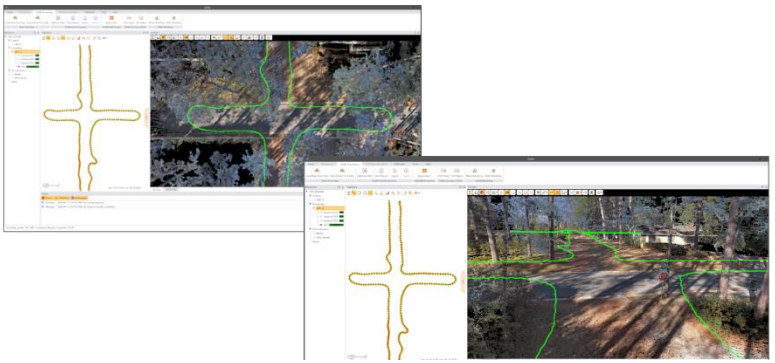
I have scanned an entire 8-acre big-box department store (building, parking lot, gas station) in an hour!

Your imagination will no doubt find even more applications once you and your crews begin using these incredible SLAM tools.

Any surveyor performing as-built surveys of any type, with any frequency, will find the RS10 to be an indispensable asset. SLAM scanning will help prevent field crews from missing important features, avoiding costly return trips to the site to locate missed features.

The included CoPre LiDAR Processing Software takes the raw data from the RS10 and improves the accuracy of the LiDAR point cloud and colorizes the cloud from the camera images collected by the scanner.

With a moderately capable computer (i7 processor with 3050Ti Nvidia graphics card or better), processing time is about twice the amount of time required to collect the data (5-minute scan requires 10 minutes of processing).



The result is an accurate, colorized point cloud file in standard formats, that is geo-referenced and ready for feature extraction. Because the output from CoPre is a standard interchange point cloud file type (.las, .laz, .e57, .pts and .rcp) you can use your choice of point cloud editing software to extract points, lines, and surfaces into your CAD software.

Shawn Billings
iGage Texas LLC
shawn@iGage.com

Shawn Billings *is a land surveyor in Kilgore, Texas and is the iGage sales and support partner covering Texas, Oklahoma, Arkansas, Louisiana and Mississippi.*

Licensed since 2003, he grew up in the profession and has over 30 years of field experience doing boundary, topographic, and ALTA/NSPS surveys.

Shawn has written for survey publications since 2008, including product reviews of GNSS hardware and field software, and a technical series on Low Distortion Projections that was cited in ASCE's Journal of Surveying Engineering.

Writing led to a working relationship with Dr. Javad Ashjaee where Shawn shaped the TRIUMPH receiver line for the U.S. market working directly with the JAVAD engineering team on product development and dealer training.

Shawn is a key participant in his state survey board and currently heads the committee designing Texas's SPCS2022 zones as part of the NGS National Spatial Reference System modernization.

RS10 SLAM Scanner

GNSS + IMU + SLAM

A Complete System RS10 features a LiDAR sensor with 120-meter scanning range collecting 320,000 points-per-second and three 5-MP cameras colorizing the point cloud. The RS10 contains a geodetic quality ground-plane antenna with a UM980 engine matching the GNSS performance of iG, SG, and CHC RTK receivers.

The kit includes a tablet, case, chest mount pack, acquisition software, perpetual post-processing software (CoPre2), 3 1-hour batteries and a quad-charger.

Everything needed to acquire scans, process scans, evaluate check points and export full resolution point clouds is included in one kit delivered in a hard case with a high-quality soft case for the chest-backpack bracket components.

Rental kits include:

- RS10
- Backpack chest holder kit
- Desktop support pad
- LT800 tablet with SmartGo, clamp
- Thumb drive with the latest version of CoPre
- CoPre dongle for processing your scans
- 3 batteries, a 4-slot charger
- Hard case for the RS10
- Soft case for the backpack chest holder

RS10 Rental Monthly	RS10, Chest holder, LT800 tablet with SmartGo app, CoPre USB dongle, batteries, case	$4,400 /mo
Lightly Used Rental Kits	Lightly used rental kits	$33,500

RS7 SLAM

Small, Easy, Indoor LiDAR Scanner

The CHCNAV RS7 is a handheld real-time 3D LiDAR SLAM scanner for collecting building interiors, enclosed facilities, and exterior building features collected at 20-to-30-meter range.

The RS7 is also useful in outdoor scenes for limited-distance scans.

Full-constellation GNSS (GPS, GLONASS, BeiDou, Galileo) with 500-Hz, 0.5°/hour IMU for georeferencing scans collected or started/ended outside.

64-channel LiDAR collects 576,000 points/second with 1 cm relative and 3 cm absolute RMS accuracy.

360° × 189° field of view captures floors and ceilings simultaneously — one collection completes the scan.

Dual 12 MP cameras with Sony binning; colorized point clouds, 3D mesh, and 3D Gaussian Splatting outputs.

SmartGo field software (included, BYO Android tablet) controls collection and allows point cloud preview to confirm coverage before leaving the site.

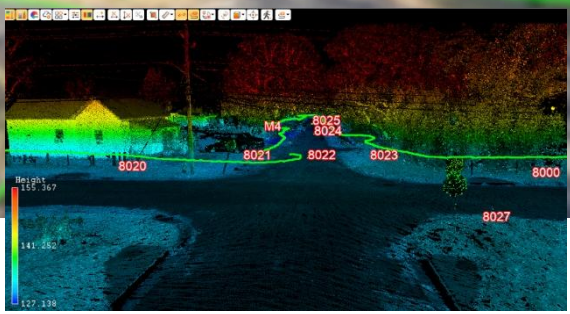
CoPre desktop software (included) delivers a georeferenced point cloud in any state plane zone, UTM zone, or local coordinate system.

512 GB internal storage, IP64 rated. Lightweight 2.6-lb. with a 150-minute battery integrated in the handle — no external cables or batteries.

RS7 Standard	Scanner, SmartGo, CoPre	$ 10,999

CoPre2

SLAM or Aerial Desktop Post-Processing



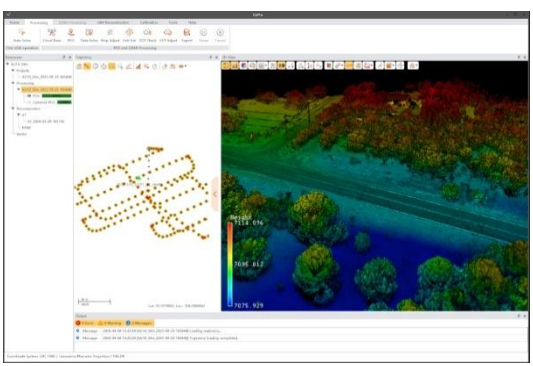
Lifetime Licensed Point Cloud Colorization and Processing

CoPre combines GNSS, inertial, image and ranging data from CHC SLAM, LiDAR, and camera products outputting single format datasets.

- Advanced post-processing of GNSS+IMU data for better accuracy
- Processes aerial and SLAM data with the same robust user interface
- Full NAD83(2011), SPCS2022 and GEOID support
- Processes multiple datasets simultaneously
- Point cloud visualization and coloring
- Lifetime licensing via a USB dongle with perpetual updates
- Compatible with Windows 11 x64, Nvidia graphics card required

Review and Export Clouds for Extraction

- Import and report vs. GCPs
- Generate ortho mosaics from aerial imagery
- Measurement and slicing tools
- Export .LAS colorized point clouds for processing and extraction



X500 Quadcopter UAV

Medium Lift Aerial Solution

The **CHCNAV X500 UAV** is a professional-grade drone engineered for exceptional payload capacity and endurance. Its built-in obstacle detection radar aids safe operations. When paired with CHCNAV sensors and CoPre desktop software, the X500 is ideal for surveying and mapping applications.

- Easy and familiar mission planning experience, robust airframe
- 5kg maximum payload weight
- 58 min empty flight time, over 50-minute flight time with 1.1kg payload
- Ready-to-fly packages
- Forward millimeter-wave radar obstacle avoidance
- Forward POV camera
- Simple RTK and PPK post-processing workflows
- CHC Alphaport payload mount

X500 Package Kit price (X500 + EC10 + B10 Pair + BS10)	$ 16,996

UAV Payloads

Advanced Photogrammetry and LiDAR

AA450 LiDAR + RGB

- Livox Avia LiDAR + 26mp camera
- Generate colorized topographic data with LiDAR and orthomosaics with RGB imagery
- 52-minute flight time on X500

Price: $14,999

C5 Orthographic RGB

- Full frame 45mp sensor
- 35mm focal length
- 90° Angle Nadir
- 256GB internal storage
- High-resolution orthomosaics / DSM

Price: $10,019

C30 Oblique 5 Camera RGB

- 5x 26mp APS-C sensors
- 25/35mm focal length
- 45°/90° Camera Angle
- 640GB single card storage +USB hub
- 3D Modeling

Price: $18,199

EasyNav EMG100

3D Machine System Positioning

- Install and calibrate a complete machine kit in hours
- Collect points, then design in cab: ground leveling, trenching, slope construction, road subgrade, foundation excavation, river dredging, farmland ridging, and pond slope work
- Full constellation GNSS tracking- GPS, GLONASS, BeiDou, Galileo
- Two IP69K-rated IS300 IMU sensors- pressure-wash rated, shock and vibration tested
- IP68 AT10 GNSS antenna with metal base: rated for MIL-STD-810H
- CB-H10D 10.1-inch display at 1024 × 600 pixels with 750 cd/m² backlight
- Android 6, 4-core 1.2 GHz, 2 GB RAM + 16 GB ROM, IP65-rated
- Kit includes CB-H10D display, 2× IS300 IMU sensors, AT10 GNSS antenna, ER-2 External Radio Kit, complete cable package, and mounting brackets

EasyNav EMG100	Display, 2x Antennas, 2x IMUs, Radio, Cables, Brackets	$ 12,999

MCNAV TX73

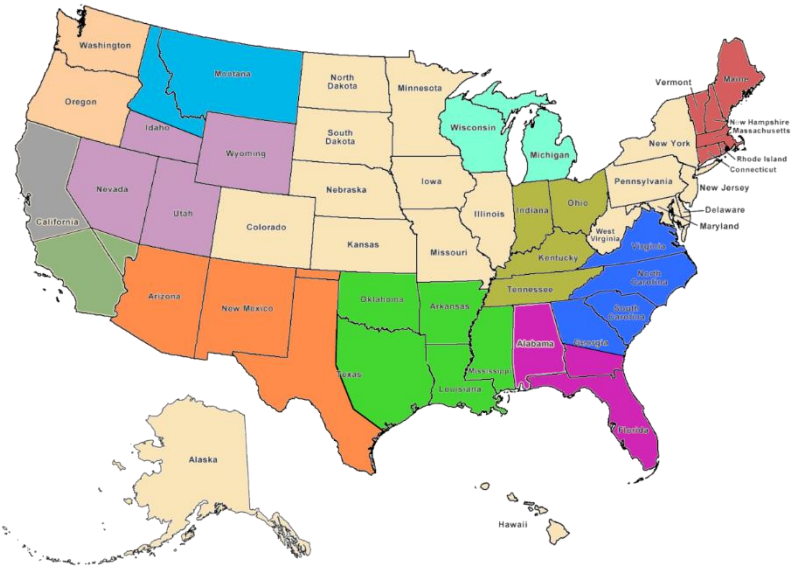
3D Excavator Guidance

The MCNAV TX73 3D Guidance System for Excavators combines advanced GNSS receivers with robust IMU sensors to accurately determine the bucket tip position.

Precise control allows for direct digging to target surfaces without manual surveys.

- Work directly from design files without re-staking the site
- Imports *.LandXML, *.DWG, and *.DXF design files plus *.dc, *.cal, *.jxl, *.lok, and *.loc coordinate system files
- MCPad300 display: 10.1-inch, 1920 × 1200 pixels
- Android 14, 8-core 2.2 GHz, 6 GB RAM + 64 GB ROM- render 3D surface models without lag
- Dual AT315 GNSS antennas provide accurate machine heading and elevation
- Four IP69K-rated IS300 IMU sensors: ±0.05° static and ±0.1° dynamic accuracy
- Supports standard buckets, tilt buckets, tilt-rotators
- Cell NTRIP and 450MHz UHF TT450S, Transparent, and Satel_3AS radio correction protocols
- MCNav cloud platform enables design file distribution to all machines from the office
- Kit includes: MT40 Excavator Body Mast Kit, GNSS receiver, 4 IMU sensors, 2 antennas, UHF radio, Wi-Fi antenna, mounting brackets, and complete cable set

TX73	Display, 2x Antennas, 4x IMUs, Radio, Cables, Brackets	$ 33,000



Founded in Salt Lake City Utah in 1996, **iGage** has grown from a niche electrical engineering and topographic map supply firm into a premier national provider of **GNSS**, **SLAM**, and **autonomous survey solutions**.

In 2013 with the introduction of Static Only receivers and automated submission tools, iGage quickly became the first GPS receiver supplier for thousands of surveyors nationwide.

Today, iGage is one of the largest GNSS suppliers in the U.S., supported by a growing network of regional offices providing expert local service for marine, aviation, and land survey applications.

We remain dedicated to service and support, we value your feedback and invite you to reach out directly with ideas on how we can better serve you.

Phone:	+1-**888-450-4922**
eMail	orders@igage.com
Address	www.iGage.com iGage 1545 S 1100 E STE 1 Salt Lake City UT 84105-2476

iGage
1545 South 1100 East STE 1
Salt Lake City UT 84105-2476
p +1-888-450-4922
www.iGage.com