Hemisphere®

GradeMetrix®



GRADEMETRIX® LOADER

3D GNSS GRADE CONTROL
AND GUIDANCE SYSTEM

Hemisphere®

GRADEMETRIX® LOADER

GradeMetrix® Loader is packed with industry leading technology. It is easy to use and delivered at an affordable price. The system can easily be installed and calibrated.

The GradeMetrix® Loader system is designed to fit seamlessly into your existing site infrastructure using standard file formats and is compatible with most base station hardware and corrections. GradeMetrix Loader, like all GradeMetrix solutions, provides a 3-year warranty for all major components.

New and experienced operators can dramatically increase accuracy, efficiency, and dependability with GradeMetrix® Loader, resulting in significant ROI in your operations immediately.

GRADEMETRIX® KEY FEATURES

- Access to all GNSS satellite constellations; including GPS, GLONASS, BeiDou, Galileo, and QZSS. for maximum accuracy and coverage in difficult environments.
- GNSS receiver supports industry standard RTK formats including RTCM3.x, ROX, CMR, and CMR+
- 2.5D and 3D operation modes all come standard.
- Simplified user interface with multiple views including plan view, profile view, cross-section view, and more.
- Supports DTMs or 3D linework.
- Real-time Cut/Fill color maps are supported to show existing progress.
- Map projections and localized coordinate systems for simplified site alignment to existing designs and models.

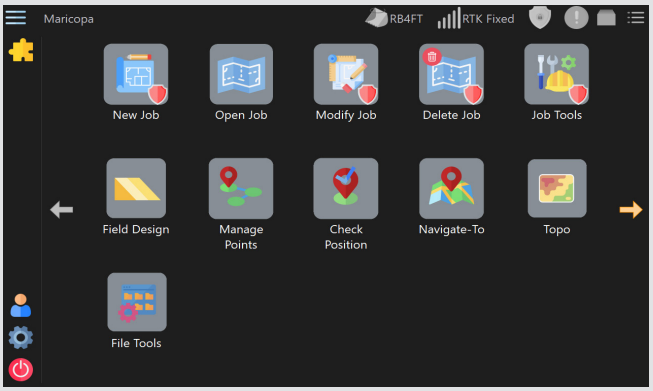


COST SAVINGS – EFFECTIVE IMMEDIATELY

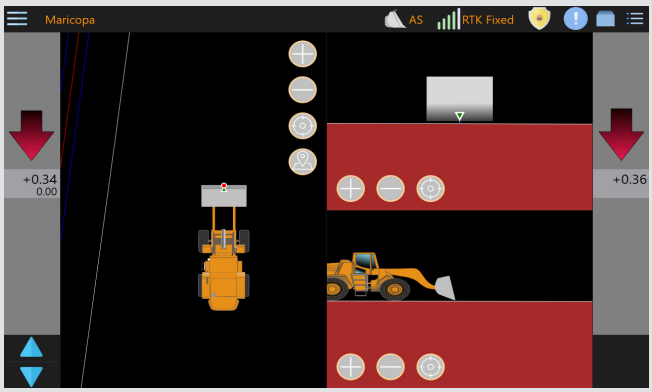
GradeMetrix® Loader offers immediate cost savings to your earthmoving activities. The simplified installation and calibration process gets your system up and running quickly. Our latest multi-frequency, multi-GNSS solution uses all available satellites in the sky as a standard feature. User access to a robust RTK solution in virtually any environment reduces expensive machine downtime, especially in difficult environments like open-pit mines or in urban canyons.

GradeMetrix® GNSS based solutions allows operators to match a slope or extend a pad or ramp along existing ground features. They can also create new ramps and basic roads on the display, thus eliminating the cost associated with using a land surveyor or model maker for such tasks.

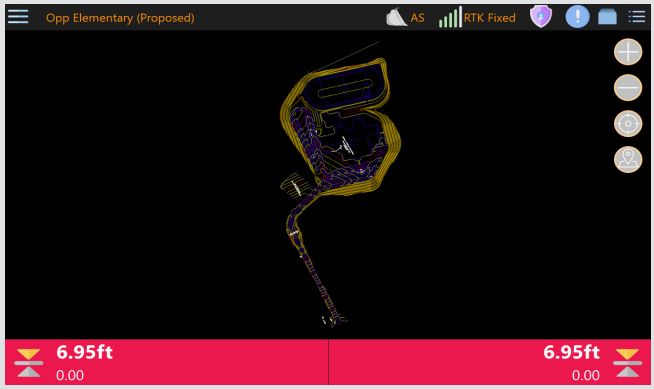
Intuitive Menu Design



Multiple Views



Supports large DTM's



OUR BENEFITS AT A GLANCE

- **RIGHT THE FIRST TIME** - Work Faster – Reduced reliance on operator skill.
- **MATERIAL SAVINGS** – Accurately calculate material volumes - Improve transportation cost - Control soil disposal cost – Prevent undercutting of material.
- **REDUCED SURVEY COST** – Manage site preparation and changes with in field design capabilities. Reduce rework. Eliminate stake replacement.
- **IMPROVED SAFETY** – Eliminate grade checking personnel around machines. Reduce operator exits from equipment.
- **3-YEAR WARRANTY** – Best In Class Warranty.
- **EASILY ADAPTABLE** – Primary components can be moved quickly between machines.

USE GNSS AT EVERY SITE

The 2.5D function in GradeMetrix® Loader allows you to use the guidance technology for an array of applications without the need for complex 3D files from a model maker.

Adding the optional Hemisphere C631 base station provides GNSS RTK corrections to your loader.

2.5D eliminates the need for survey points, local transformations, and projections, resulting in faster work cycles and dramatically improved ROI.

RUGGEDIZED HARDWARE

GradeMetrix® Loader solution is powered by hardware components that have passed extensive shock, vibration and environmental testing to withstand the harshest job site conditions.

Grademetrix is designed with support for the VR1000 and VR500 GNSS RTK heading receivers. Both receivers, with their integrated UHF radio, require a single cable connection to the IronTwo display. Multiple decades of experience merging GNSS technology with precision applications provides a simplified installation and calibration procedure.



APPLICATION EXAMPLES



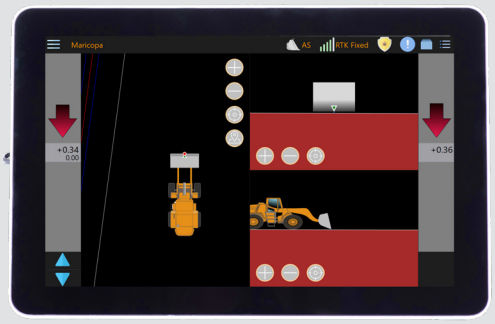
ROAD CONSTRUCTION



QUARRIES & STOCKPILES



MINING



- 10” (1920 x 1200 resolution) touchscreen
- Microsoft Windows™ operating system
- Sunlight Viewable display
- Easy and intuitive user interface
- Handles large 3D DTM project files
- Wi-Fi, Bluetooth, and ethernet support
- Integrated cellular modem for Ntrip corrections or remote/ data support
- IP65 rating

IRONTWO RUGGED TERMINAL



- Mastless position and heading RTK Smart Antenna
- Multi-frequency, Multi-GNSS GPS/GLONASS/BeiDou/Galileo/ QZSS capable
- Integrated 400MHz UHF radio
- Powerful WebUI, ethernet, CAN, serial, Bluetooth and Wi-Fi
- IP69K and MIL-STD-810G
- Hemisphere GNSS Athena® RTK engine
- Supports Hemisphere GNSS Atlas® L-band Correction Service

VR500 GNSS RTK SMART ANTENNA



- Multi-frequency, Multi-GNSS GPS/GLONASS/BeiDou/Galileo/ QZSS capable
- Rugged GNSS Receiver
- IP69K and MIL-STD-810G
- Integrated 400MHz UHF Radio
- Powerful WebUI with ethernet, CAN, serial, Bluetooth and Wi-Fi connections
- Hemisphere GNSS Athena® RTK engine
- Supports Hemisphere GNSS Atlas® L-band Correction Service

VR1000 GNSS RTK HEADING RECEIVER



- IP69K Enclosure /EP455 Shock/Vibration Rating
- Compact Design
- Signals Received: GPS L1/L2/L5, GLONASS G1/G2, BeiDou B1/B2/B3, SBAS, L-band, Galileo E1/E5a/E5b, and QZSS

A46 GNSS ANTENNA



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