



GRADE

AMW Topographical Survey Solution

GRADE // Site Management Solution

GRADE I Project, Asset and Site Management

GRADE I is a low-cost GNSS enabled rugged industrial Tablet running AMW GRADE I software for rough grade (elevation) checking and asset management. The user can load maps, design files or overlay aerial images to locate assets, geographic points or other job site points with meter accuracy. Site supervisors and crew can quickly locate points and check rough grade. This is a big time saver, versus using paper maps or sending crew out to locate something with only general directions. For more accuracy, an external antenna and pole with tablet mount are available for up to 50cm accuracies.

Bringing this tool to the job site helps Supervisors and crew efficiently oversee operations across the whole site, identifying problem areas quickly. By loading digital site maps and overlaying design drawings with other data sources like aerial survey and imagery data on the Tablet, helps the Site Supervisor find site assets and features as well as check rough grade, to insure job accuracy and progress.



GRADE // Topographical Survey Solution

GRADE II Topographic Maps, Grade Elevations, RTK Control

GRADE II adds to GRADE I by providing cm elevation and position accuracy with an external Survey grade RTK capable GNSS Receiver that wirelessly communicates with the Tablet. Hold the Tablet, or mount it in your vehicle, while measuring elevations and positions with the RTK receiver set.

GRADE II makes it easy to collect surveyor accurate topographic data on any job site by simply walking or driving, quickly creating detailed topo maps. The density of elevation points can be adjusted, providing a more detailed topographic survey versus hiring a surveyor, eliminating stakes and providing accurate data for earth moving operations.

GRADE II can also be used to measure Grade elevations for monitoring project progress. GRADE II can set RTK GNSS control points, so you have the same reference point from your survey to when using automated blade control to move earth, reducing errors and maximizing accuracy. GRADE II can be tied to a coordinate system, such as State Plane or UTM, to ensure repeatability. The point information is made into a map showing elevation contours, commonly known as a topo. The point file information can be exported and used to create a design (triangulated network) in Watercourse™ or other 3rd party CAD design software. It provides the elevation difference between a surface and a design in real time.



GRADE // Key Features

Features	GRADE I	GRADE II
Rugged Android Tablet with Cellular, Bluetooth and WiFi	✓	✓
AMW GRADE Software pre-loaded	✓	✓
Long lasting Lithium batteries	✓	✓
Import Topo, Design, & Google maps	✓	✓
Accepts AMW Watercourse design files	✓	✓
Accepts Line drawing, DXF, CSV, LANDXML, CTI file types	✓	✓
Use to locate site assets	✓	✓
Internal GNSS with 50cm-1.5m accuracy	✓	✓
Separate wireless RTK GNSS rover with 1-2cm accuracy		✓
Create detailed Topo elevation map of work site		✓
Check Grade elevations		✓
Set RTK Control Points		✓
Calculates surface TIN file for Machine Control		✓

Specifications Note: * Only available with GRADE II solution

AMW Preloaded Software

- GRADE I or GRADE II

CHCNAV LT700 Android Tablet

- 8" IPS Touch Screen screen
- Android 7.1 OS
- 1.4 Ghz 8-core processor
- 16 Mega pixel rear camera
- IP67 water and 1.5m fall resistant
- 8000 mAh Li-ion battery

CHCNAV i70 Surveyor GNSS Receiver*

- 220 channel Trimble GNSS RTK engine
- GPS, SBAS, GLONASS, BDS, GALILEO dual frequency
- Dual hot swappable batteries for up to 12 hrs operation
- Bluetooth, WiFi, Cellular & UHF coms equipped
- Horizontal Accuracy: 8mm + 1ppm RMS
- Elevation Accuracy: 15mm + 1ppm RMS

Operating System Compatibility

- Android 7.1 or higher

Included Accessories with GRADE

- i70 Hard Carrying Case with accessories, UHF antenna, 2 x lithium ion batteries*
- Vehicle magnetic mount for i70*
- RAM Mount Kit for vehicle mounting

Optional: RAM Mount triple suction cup base



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AMW® Machine Control Solutions, Inc.,

Saranac, MI, USA 48881 (616) 642-9514 www.amwgps.com