

REMOTE ASSET MANAGEMENT



Benefits of the Tierra™ Solution

- Productivity
- Maintenance
- Utilization
- Security
- Job Costing

It's time.

Are you ready for the Telematic revolution?

Telematics has become the decisive factor for the future. Adopting and utilizing the best technology for your business will help you to increase your productivity and profitability like never before. TopconTierra™ has applications for surveying, machine control in construction, mining and agriculture. Each of these sectors have different requirements for access to the data collected for processing, but all are led by TIERRA™ being the portal through which all data flows.

Day by day our service is growing with your business...

If you want to be a leader in your market, Topcon Tierra™ should be your 1st choice. We work everyday to help companies just like yours to achieve tangible and measurable results by using the latest research, the smartest technology and the most secure systems on the planet.

The Tierra Solution...How does it work?

- Tierra™ Hardware is the communications device installed on your machine.
- The Tierra™ Subscription Plan enables the features you need, and configures how often the unit communicates.
- Tierra™ Web is the internet based user interface—where you'll go to configure alerts, generate reports, and more.

All on road and off road assets are managed with just one login...

Construction

"At a glance" you can view machine metrics, performance statistics and real time situations.

Agriculture

We can simply track everything with equipment maintenance and custom services.

Fleet Management

TopconTierra™ provides you with critical data effortlessly, from and to on-board equipment. You will be able to see all of your assets on worldwide maps.

Topcon Tierra reduces cost and improves productivity



Productivity

A more accurate productivity measurement can be obtained by distinguishing machine idle time from actual production time. By utilizing the sensor or Canbus capabilities of your Tierra hardware, you can see which hours are productive and which hours are just wasteful idle time. Knowing this information daily allows you to address the issues promptly with operators – enabling an immediate improvement.



Maintenance

Tierra users set up machines to alert once they've reached their scheduled maintenance interval. The Tierra system is user configurable for any interval. Tierra replaces labor intensive and mistake prone manual data collection regimens. With accurate machine hours provided daily, managers can be sure that machines are being serviced at the appropriate maintenance intervals. Tierra enables users to maintain machines within a much tighter tolerance of the specified service intervals.



Utilization

Tierra users are able to quickly determine which machines are not being used, and are available for redeployment to a more appropriate job site. Imagine being able to pull up a report in 30 seconds that shows all of your equipment with less than 3 hours run time in the last week. Are you renting equipment on other jobsites? Can those rental expenses be avoided if you have real time information on machine usage?



Security

To prevent unauthorized use or movement, Tierra offers multiple security options such as curfew, geofencing, and motion detection. Tierra can text message and/or email managers whenever a machine is running outside of a customer's normal hours of operation, when a machine is leaving a geofenced area, or if the machine moves when it's not powered on. Once you know your machine has left, it's easy to track and recover. Tierra delivers a significant reduction in theft related costs.



Topcon Tierra

Topcon Tierra delivers a reliable, easy-to-use equipment tracking and information management solution that provides clear visibility to your equipment 24/7 anywhere in the world.



| Equipment ID | Fence | From | To | Total | Active | Mileage (Miles) |
|------------------|--------|-------------------|-------------------|-----------------|----------|-----------------|
| STX 107 572-0247 | Team 1 | 01:07:10 06:29:42 | 01:07:10 06:30:42 | 00:02:00 | 00:02:00 | 0.191 |
| STX 107 572-0247 | Team 1 | 01:07:10 06:33:37 | 01:07:10 06:35:01 | 00:01:24 | 00:01:24 | 0.193 |
| STX 107 572-0247 | Team 1 | 01:07:10 06:36:46 | 01:07:10 06:36:38 | 00:01:52 | 00:01:52 | 0.191 |
| STX 107 572-0247 | Team 1 | 01:07:10 06:41:25 | 01:07:10 06:42:57 | 00:01:32 | 00:01:32 | 0.208 |
| STX 107 572-0247 | Team 1 | 01:07:10 06:41:25 | 01:07:10 06:42:57 | 00:01:32 | 00:01:32 | 0.208 |
| STX 107 572-0247 | Team 1 | 01:07:10 06:44:38 | 01:07:10 06:46:18 | 00:01:40 | 00:01:40 | 0.199 |
| STX 107 572-0247 | Team 1 | 01:07:10 06:44:38 | 01:07:10 06:46:18 | 00:01:40 | 00:01:40 | 0.199 |
| STX 107 572-0247 | Team 1 | 01:07:10 06:49:06 | 01:07:10 06:50:30 | 00:01:24 | 00:01:24 | 0.194 |
| STX 107 572-0247 | Team 1 | 01:07:10 06:49:06 | 01:09:10 07:14:31 | 2 days 00:25:25 | 07:37:03 | 36.831 |
| STX 107 572-0247 | Team 1 | 01:07:10 06:52:13 | 01:07:10 06:53:53 | 00:01:40 | 00:01:40 | 0.188 |
| STX 107 572-0247 | Team 1 | 01:07:10 06:56:30 | 01:07:10 06:57:50 | 00:01:20 | 00:01:20 | 0.194 |
| STX 107 572-0247 | Team 1 | 01:07:10 06:59:34 | 01:07:10 07:01:10 | 00:01:36 | 00:01:36 | 0.190 |
| STX 107 572-0247 | Team 1 | 01:07:10 07:04:09 | 01:07:10 07:05:26 | 00:01:17 | 00:01:17 | 0.196 |
| STX 107 572-0247 | Team 1 | 01:07:10 07:24:42 | 01:07:10 07:26:18 | 00:01:36 | 00:01:36 | 0.211 |
| STX 107 572-0247 | Team 1 | 01:07:10 07:28:46 | 01:07:10 07:29:57 | 00:01:11 | 00:01:11 | 0.190 |
| STX 107 572-0247 | Team 1 | 01:07:10 07:31:37 | 01:07:10 07:34:06 | 00:02:29 | 00:02:29 | 0.209 |
| STX 107 572-0247 | Team 1 | 01:07:10 07:36:58 | 01:07:10 07:38:14 | 00:01:16 | 00:01:16 | 0.193 |
| STX 107 572-0247 | Team 1 | 01:07:10 07:40:02 | 01:07:10 07:41:38 | 00:01:36 | 00:01:36 | 0.203 |
| STX 107 572-0247 | Team 1 | 01:07:10 07:44:17 | 01:07:10 07:45:38 | 00:01:21 | 00:01:21 | 0.199 |
| STX 107 572-0247 | Team 1 | 01:07:10 07:47:18 | 01:07:10 07:49:18 | 00:02:00 | 00:02:00 | 0.196 |
| STX 107 572-0247 | Team 1 | 01:07:10 07:52:05 | 01:07:10 07:53:22 | 00:01:17 | 00:01:17 | 0.175 |
| STX 107 572-0247 | Team 1 | 01:07:10 08:20:15 | 01:07:10 08:21:55 | 00:01:40 | 00:01:40 | 0.204 |
| STX 107 572-0247 | Team 1 | 01:07:10 08:24:29 | 01:07:10 08:25:50 | 00:01:21 | 00:01:21 | 0.193 |

Job Costing

Most contractors gather machine run time for job costing. The data gathering process is typically expensive, labor intensive, subject to clerical errors, and even more subject to fudging. Tierra provides this information daily, and reports are available with a few simple keystrokes. The data is reliably accurate, and not subject to human error or fudging. In addition, with integration into back office software, the cost of human data entry can be eliminated.

It's time.

The Tierra™ Value Proposition

Tierra™ is a tool for gathering remote machine location, operating hours and machine information. The Tierra solution allows managers to make more informed decisions, and eliminates slow, inaccurate, and labor intensive data gathering regimens.

Tierra™ goes well beyond gathering large amounts of raw machine data. Tierra™ sifts through all that data and provides immediate alerts and useful reports. And that allows managers to focus on the things that are actionable, with minimal effort required to uncover those important pieces of information.

The concept is pretty simple. We've designed Tierra™ so that it won't bother you with situations that are ideal. It will alert you when a situation is less than ideal, allowing you to take immediate steps to improve the situation.



AM 25 / AM 50

AM 25 (Asset Manager) is the entry level hardware where the AM 50 (Asset Manager) is the next level up. Both allow major Asset Management functionalities such as real location and on/off data, where the AM 50 also logs the machines CAN bus data. It's small size makes it easy to install.



Specifications subject to change without notice
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| SPECIFICATIONS | | |
|------------------------------------|--|--|
| | AM 25 | AM 50 |
| ON-BOARD DEVICE | | |
| Micro Processor | ARM7 | |
| Memory | 58 KB | |
| RAM | 128 MB | |
| Flash NAND | | |
| Ports & Connectors | (1) RS232 ¹ | (1) RS232 ¹ |
| CAN Bus | No | (1) Deutsch 12-pin |
| Connector | GPS = SMA & GPRS = TNC | GPS = SMA & GPRS = TNC |
| Real Time Clock (Internal) | Yes | |
| GSM/GPRS Modem (Internal) | Quad Operating Bands: GSM850/900/1800/1900 & SMS capable | |
| Antennas (External) | GSM/GPRS & GPS | |
| GPS Receiver | Yes | |
| Sensor | 3-Axis Accelerometer | |
| Input/Output | | |
| Input Device | (2); Digital/Frequency (software configuration) | (2); Digital/Analog/Frequency (software configuration) |
| Output Devices | None | (1) |
| Power Supply | Ground battery (9 to 36V) | |
| Batteries (Internal) | NiMH | |
| Remote Capabilities | | |
| Configuration | Yes | |
| Firmware Update ² | Yes | |
| Environmental | | |
| Water/Dust Resistance | IP673 (with mating connector) | |
| Physical | | |
| Dimensions (w/o mating connectors) | L: 5.2" x W: 4.7" x H: 1.4" (L: 133 mm x W: 119 mm x H: 36 mm) | |
| Weight (with internal batteries) | 324 g | |

¹ Debug Software (flash & configuration)
² With the exception of downloading time, updates are performed during normal usage.
³ Totally protected against dust and the effect of immersion between 5.9055" & 39.3701" (15 cm & 1 m).
 * Under optimal conditions



Your local authorised Topcon distributor is: