



# TOPCON TIERRA

REMOTE ASSET MANAGEMENT





## Visibility to Remote Assets 24/7 Anywhere in the World

- Reduce fuel costs and emissions
- Improve machine security
- Optimize maintenance
- Manage equipment utilization

### Reduce cost and improve productivity

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.

If you want to be a leader in your market, Topcon Tierra™ should be your first 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 Topcon Tierra solution has three components.

- Tierra Hardware is the communications device installed on your machine.
- 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.

### Construction

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

### Agriculture

Simply track everything with equipment maintenance and custom services.

### Fleet management

Tierra 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.

Location	Team	Time	Level	Action	Mileage
82K 187 572-0287	Team 1	010710 06:26:42	010710 06:30:42	00:02:20	01:181
82K 187 572-0287	Team 1	010710 06:33:57	010710 06:35:51	00:01:28	00:01:28
82K 187 572-0287	Team 1	010710 06:36:46	010710 06:39:26	00:01:52	00:01:52
82K 187 572-0287	Team 1	010710 06:41:25	010710 06:42:57	00:01:32	00:01:32
82K 187 572-0287	Team 1	010710 06:44:39	010710 06:46:19	00:01:40	00:01:40
82K 187 572-0287	Team 1	010710 06:46:39	010710 06:48:18	00:01:40	00:01:40
82K 187 572-0287	Team 1	010710 06:49:09	010710 06:50:30	00:01:24	01:194
82K 187 572-0287	Team 1	010710 06:49:09	010710 07:14:31	00:02:00:58	00:02:00:58
82K 187 572-0287	Team 1	010710 06:52:13	010710 06:53:53	00:01:40	00:01:40
82K 187 572-0287	Team 1	010710 06:58:29	010710 06:57:05	00:01:20	00:01:20
82K 187 572-0287	Team 1	010710 06:59:34	010710 07:01:15	00:01:20	00:01:20
82K 187 572-0287	Team 1	010710 07:04:59	010710 07:05:26	00:00:17	00:00:17
82K 187 572-0287	Team 1	010710 07:24:40	010710 07:25:18	00:01:36	00:01:36
82K 187 572-0287	Team 1	010710 07:26:48	010710 07:25:27	00:00:11	00:00:11
82K 187 572-0287	Team 1	010710 07:31:37	010710 07:34:08	00:02:29	00:02:29
82K 187 572-0287	Team 1	010710 07:35:04	010710 07:38:34	00:03:36	00:03:36
82K 187 572-0287	Team 1	010710 07:40:52	010710 07:41:18	00:01:26	00:01:26
82K 187 572-0287	Team 1	010710 07:44:17	010710 07:45:39	00:01:21	00:01:21
82K 187 572-0287	Team 1	010710 07:47:18	010710 07:49:18	00:02:20	00:02:20
82K 187 572-0287	Team 1	010710 07:52:55	010710 07:53:22	00:00:17	00:00:17
82K 187 572-0287	Team 1	010710 08:00:16	010710 08:01:54	00:01:40	00:01:40

### 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.





### The Tierra Value Proposition

Tierra is a tool for gathering remote machine locations, 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 sifts through all that data and provides immediate alerts and useful reports assisting managers to focus on the things that are actionable, with minimal effort required to uncover important pieces of information. Tierra is designed to alert you when a situation is less than ideal, allowing you to take immediate steps to improve the situation.

### AM53

The AM family has a powerful on-board processor with significant memory allowing up to 10 second logging of all parameters when the engine is running. All datum is stored with a UTC timestamp.

AM53 On-board Device	
Micro Processor	ARM Cortex M3
RAM / Flash NAND	32 MB / 256 MB
Ports and Connectors	
Serial Port	1x RS232 <sup>1</sup>
CAN Bus	2
Connector	1x Deutsch 12R pin GPS: SMA GSM: TNC
Components	
Real Time Clock (Internal)	Yes
UMTS Modem (Internal)	800 / 850 / 900 / 1900 / 2100 MHz
GMS Modem (Internal)	850 / 900 / 1800 / 1900 MHz and SMS capable
CDMA Modem (Internal)	BC0/BC1 and BC10 subclass 2+3, 800 / 1900 MHz
Antennas (External)	GPS, GLONASS, and GSM
GNSS Receiver	GPS L1, GLONASS Ready; 20 Channels
Input Device	2x Digital/Analog/Frequency
Output Device	1x Digital
Power	
Power Supply	Ground and battery 9 to 36 V
Batteries (Internal)	NIMH
Remote Capabilities	
Configuration	Yes
Firmware Update <sup>2</sup>	Yes
Physical and Environmental	
Dust/Water Rating	IP67
Operating Temp	-30°C to 85°C
Humidity	5 to 95% RH
Vibration	25 Grms from 20 to 2000 Hz
Shock	45 Grms
Size (l x w x h)	133 x 119 x 36 mm
Weight	285 grams
<sup>1</sup> Debug Software (flash & configuration)	
<sup>2</sup> With the exception of downloading time, updates are performed during normal usage.	



### Productivity

- Productivity measurement
- Utilization of the sensor or CAN Bus capabilities of your Tierra hardware shows which hours are productive and which hours are idle

### Maintenance

- Receive scheduled maintenance alerts

### Utilization

- Determine which machines are not being used
- Re-evaluate machine usage on job sites
- Redeploy machines that are under utilized on different jobsites

### Security

- Multiple security options such as curfew, geofencing and motion detection
- Notification by text message or email
- Easy to track and recover
- Reduce theft related costs



For more information:  
[topconpositioning.com/tierra](http://topconpositioning.com/tierra)

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