

propeller

# DirtMate



# Map your next move in real time with **DirtMate**



# What we heard from our users

"It's not easy for field teams to access the same data we have in the office, which leads to miscommunication, confusion, and rework."

"I want to track machine utilization, but each OEM system reports differently."

"GNSS systems are too complicated, expensive, and require additional software."

"Machine data was siloed and unreliable."

"I don't have an easy way to track team productivity and identify when production's lagging."

"We need an easier way to monitor elevation changes of ground or structures."

"My machine data, rover/total station data, and drone data all live in different systems. I don't have the full picture."



# How it works

# Key features

## Real time

Monitor real-time position and elevation with cell or wifi connectivity

## 4G compatibility

Operates with a wide range of 4G LTE networks across regions

## Long-range connectivity

Leverage 900 MHz WiFi HaLow for extended communication distances

## 7600mAH battery

Operate for up to 48 hours with confidence



## Any OEM

DirtMate works with equipment from any manufacturer, no matter the brand

## Easy installation

Rugged mounting system for quick and universal setup on machines or rover poles with 5/8th thread

## Durable design

IP66/IP68-rated for weather and environmental resilience

## DirtMate Mounting



1

Magnetic Base



2

Rail Mount



3

Metal Bracket

# Power sources



- **Auxiliary power outlet**

Wall Chargers (AC), Solar Power (MC4), Vehicle Charger (DC), Power over Ethernet (POE), USB-C

- **Deutsch connector**

- **Hardwire**

# Streamlined install



1

Base Station setup



2

Install and Measure up



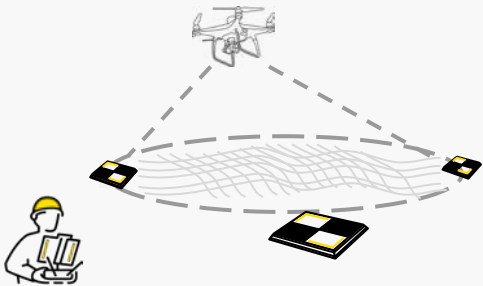
3

Powered by the machine

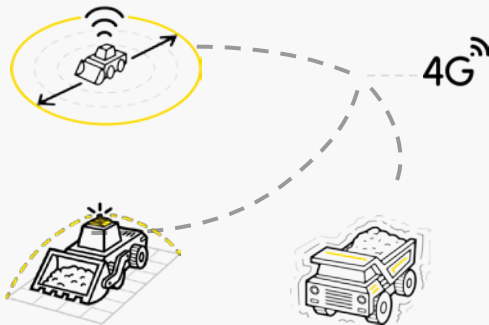
# Your fully-integrated progress tracking workflow — from ground to cloud

Unify your drone surveys and DirtMate data on the same map.  
Generate new surfaces every 30 minutes to visualize and track daily production.

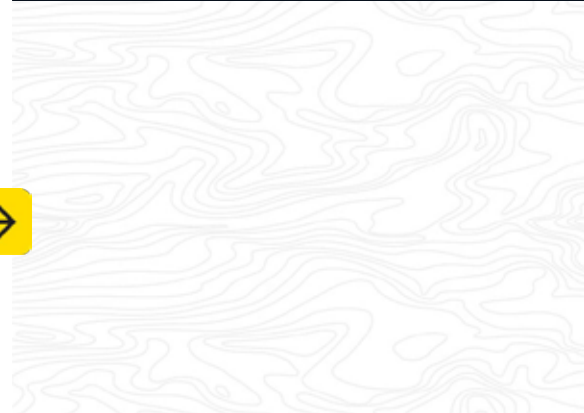
## STEP 1: FLY YOUR DRONE



## STEP 2: LET DIRTMATE FILL IN THE GAPS



## PPK SURFACES EVERY 30 MINUTES





# Solutions

# There's a DirtMate-powered solution to every challenge

Here's what you'll **unlock in the platform.**

Progress and  
production  
tracking

Load counts

Machine  
utilization

Position  
monitoring

Real-time 3D  
visualizations +  
maps

**LOAD COUNTS**

Track productivity with automated load counts and data-driven insights

**FEATURES:**

- ✔ **Productivity metrics:**  
Automatically track cycle times, load counts, and dumps.
- ✔ **Analytics tools:**  
Leverage data for efficiency studies and performance analysis.
- ✔ **Detailed CSV downloads:**  
Download in-depth data for deeper analysis and reporting.

**MACHINE UTILIZATION**

Optimize your operations with real-time machine utilization data

**FEATURES:**

- ✔
- ✔
- ✔
- ✔

**PROGRESS TRACKING**

Integrate your drone and machine data to unlock daily production volumes

**FEATURES:**

- ✔
- ✔
- ✔
- ✔

**POSITION MONITORING**

Monitor the real-time elevation of any machine, object, or body of water

**FEATURES:**

- ✔
- ✔
- ✔
- ✔

SITE: 1788 LAKEPOINT COMMERC
SURVEY: AUG 16, 2024
DIRTMATE SURFACE ● Aug 21, 9:00 pm
VIEW ON MOBILE
SETTINGS
SHARE
UPLOAD

WED, AUG 21, 2024  
6:00 AM - 9:00 PM

**HARD BODY TRUCK (7 OF 7)**

Machine	Run	Idle	Loads	Dumps
HT 142	9:20	38%	58	59
HT159	9:38	40%	65	56
HT160	9:50	45%	52	53
HT 140	9:31	29%	51	49
HT 141	9:39	29%	50	49
HT 138	0:00	100%	0	0
HT 139	0:01	-	0	0
HT158	-	-	-	-

Aug 21, Trail: 06:00 AM - 09:00 PM Machine position: 01:09 PM

6:00 am 9:00 pm

### Load & dump counts

Aug 21, 2024, 6:00 AM - 9:00 PM  
7 Hard Body Trucks  
Refinements: 2 loading machines, no load zones, 1 dump zone

Loads hourly

**266** Loads    **266** Dumps

07:23 Avg haul duration	01:35 Avg load duration	01:40 Avg dump duration	2,672.9 ft (US) Avg haul length
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**BY LOAD**    **BY DUMP**

To SKO-CF	Dumps 266
↳ From EX207	160
↳ From EX172	103
↳ From unknown load area	3

DOWNLOAD

Photo viewer Timeline Machines Timeline REC BY propeller SCS Local Grid (1788 Lakepoint Commerce Circle) N: 1502 914 290 ft, E: 2 122 143 710 ft, Z: 916 909 ft

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### MACHINE UTILIZATION

Optimize your operations with real-time machine utilization data

#### FEATURES:

- ✔ **Run/idle time:**  
Monitor daily run and idle times of active machines.
- ✔ **Live machine location:**  
Visualize machine activity on a map to track and record haul routes.
- ✔ **Utilization history:**  
Compare operator efficiency against your company's average for better benchmarking.
- ✔ **Automated daily reports:**  
Get summaries of key productivity metrics to keep your team informed.

### PROGRESS TRACKING

Integrate your drone and machine data to unlock daily production volumes

#### FEATURES:

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- ✔

propeller | AERPOINTS | HARDWARE | DATA PROCESSING

SITE: RESIDENTIAL BUILD | SURVEY: OCT 01, 2024 | DIRT/HAZE SURFACE | Oct 8, 2:30 pm

VIEW ON MOBILE | SETTINGS | SHARE

TUE, OCT 8, 2024  
6:30 AM - Now, updated at 2:37 PM

Get by: A-Z | Group by: Machine type | Move | Info | Truck loading: Off

16 Machines (16 of 16)

3 SCRAPER (3 OF 3)

Machine	7 am	8 am	9 am	10 am	11 am	12 pm	1 pm	2 pm	3 pm	4 pm	5 pm
#158 627 Scrapper 627K								3:34	9%	0	29
#159 627K Scrapper 627K							10:00	12%	0	0	81
Simpson 637E 2 637E							9:55	18%	0	0	55

6 ARTICULATED TRUCK (6 OF 6)

Machine	7 am	8 am	9 am	10 am	11 am	12 pm	1 pm	2 pm	3 pm	4 pm	5 pm
#410 Bell B45E B45							8:25	26%	27	0	
#411 BELL B45T B45							0:04	52%	0	0	
#488 45T Bell Dumptruck B45							9:28	48%	0	0	
#489 Volvo ADT A40G A40G							0:26	93%	0	0	

Machine report  
16 machines - Oct 8, 2024, 6:30 am - Now

Machine utilization  
16 machines

Run time	89:12
Move time	82:20
Idle %	24%

Load & dump counts  
16 machines

Loads	51
Dumps	

Smart cycles  
16 machines

Smart cycles	165
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Photo viewer | POWERED BY propeller | 33m | Local Grid (meters) 7-16-16 (m) N: 2 190 795.913 m E: 5 863 712.297 m Z: 295.287

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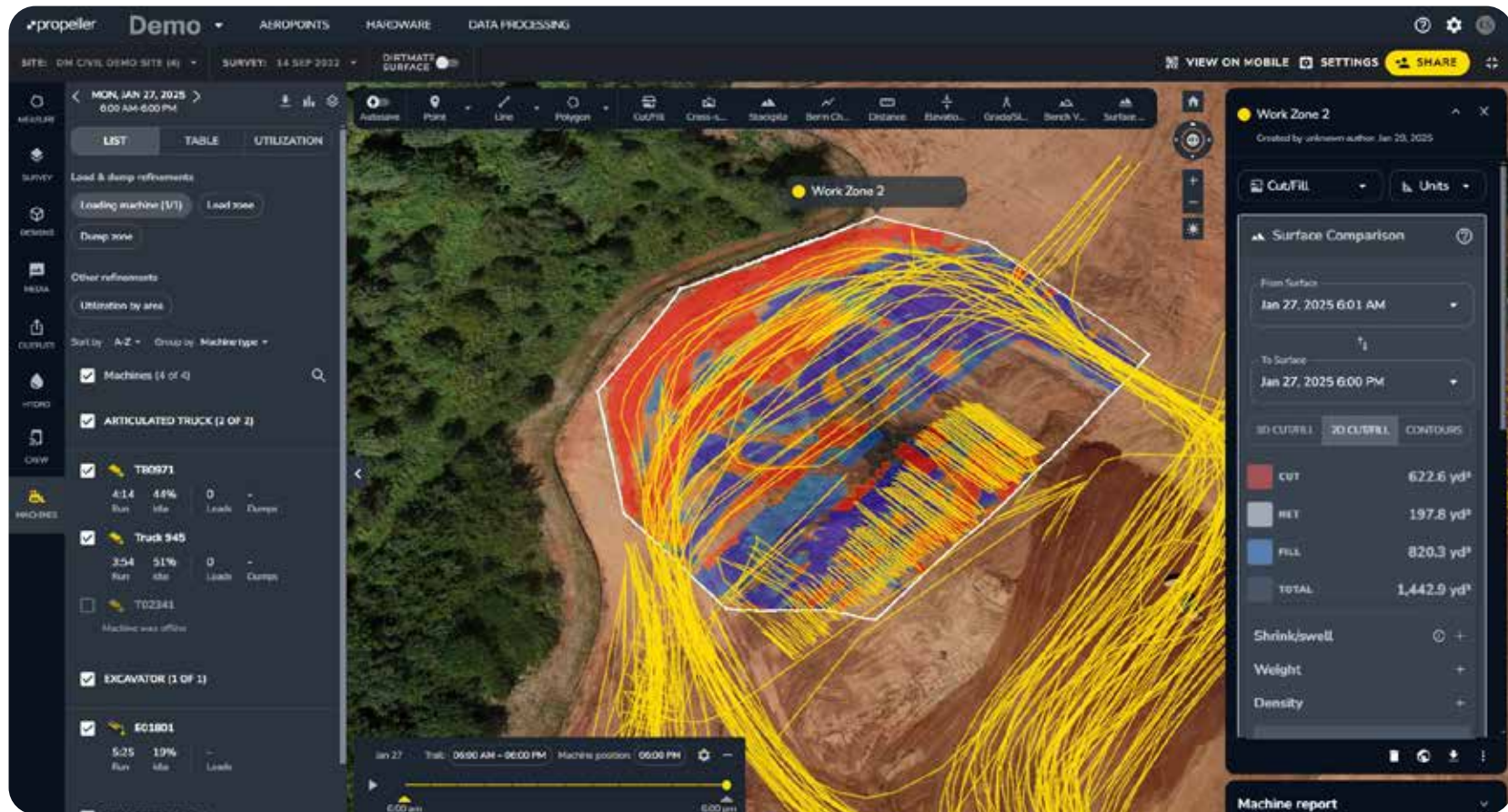
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Get what you need every 30 minutes, wherever your machines are actively working
- ✔ **Track and report on daily cut/fill volume:** Manage daily progress reports without the need for surveyors or drones
- ✔ **Daily automatic earthwork takeoff:** Pick a region of the project and finish or sub-grade design for daily take-off reports from DirtMate surfaces.
- ✔ **Keep surface elevation on record:**  
Track changes in elevation at specific points across multiple surveys for historical comparison

### POSITION MONITORING

Monitor the real-time elevation of any machine, object, or body of water

#### FEATURES:

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### FEATURES:

- ✔ **Achieve 1/10ft (3cm) accuracy:**  
Track elevation changes or water levels with centimeter-level precision
- ✔ **Monitor structural movement:**  
Stay informed about the position of walls, water bodies, and other structures, even in challenging environments
- ✔ **Dynamic position tracking:**  
Monitor the real-time location and movement of structures to identify potential risks or inefficiencies
- ✔ **Historical positioning data:**  
Record and analyze position data over time to improve maintenance, planning, and site management



# Demo



# Pricing

# Pricing

## Annual subscription and Hardware Package

### DIRTMATE GNSS RECEIVER

\$1,500.00

- 8-pin-Deutsch Power Cable
- Deutsch extensions
- Deutsch splitter
- Metal Mounting Bracket

### DIRTMATE ANNUAL SUBSCRIPTION

\$1,800.00

- DirtMate Data Storage
- DirtMate Surface Generation
- DirtMate PPK/RTK Corrections
- Machine access in platform

Optional - Annual cellular data plan  
(\$450/year)

### Accessories

- Shipping \$40 Dirtmate
- Car Charger (12V) \$40.00
- Wall Charger \$80.00
- Solar MC4 Cable \$40.00
- Rail mount \$40.00
- 3m extension cable \$40.00

propeller

Thank  
you



TECHNOLOGY  
PRODUCTS

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