

VG LoadPro

On-Board Weighing and fuel monitoring System for Mining Haul Trucks

This document describes the modifications of weighing system and provides the dealers pricing for the system.

1. VG LoadPro OEM

Designed for the installation for the client that already has monitoring or mine fleet management systems.

This kit consists of:

- Weighing controller LoadPro



- Fuel level sensor;



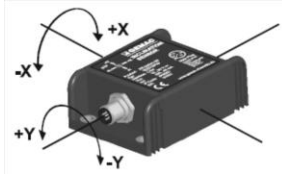
- Pressure sensors to be mounted in the suspension (4pcs.);



- Lights to show the level of loading for operator of the excavator



- Inclination sensor



- Necessary cable accessories and mounting kit

This kit provides the following data via CAN or RS 232 interfaces:

- Load measuring – the accuracy is 2-3% (on the unloading and the accuracy on loading depends on the leveling of surface and up to 5-7%)
- Fuel level and consumption measuring – the accuracy is 2-3%
- Motohours
- Three level payload light signaling to excavator operator
- Data storage and transmission to on-board controller

This kit does not include any display for the truck driver and can be installed only if the on-board controller of Mine fleet management system is installed

Options:

- external digital displays for both sides instead of lights.



2. VG LoadPro

Designed as the stand alone system with the ability to transmit the data to external systems (mine fleet management and monitoring).

This kit consists of:

- On-board computer with touch screen Intelligent Panel IP-01



Main screen of the system:



- Weighing controller LoadPro



- Navigation unit NB-04



- Fuel level sensor;



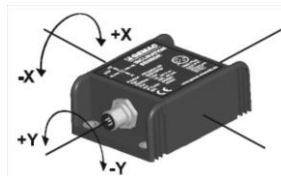
- Pressure sensors to be mounted in the suspension (4pcs.);



- Lights to show the level of loading for operator of the excavator



- Inclination sensor



- Necessary cable accessories and mounting kit

This kit provides the following data to the driver as well as with CAN or RS 232 interfaces:

- Load measuring – the accuracy is 2-3% (on the unloading and the accuracy on loading depends on the leveling of surface and up to 5-7%)
- Fuel level and consumption measuring – the accuracy is 2-3%
- Cycle details: time of moving empty\loaded, waiting for unloading, waiting for loading, time of loading\unloading.
- Number of trips
- Overloads
- Intuitive driver graphical interfaces
- Motohours
- Speed

- Distance of each trip
- Three level payload light signaling to excavator operator
- Data storage and transmission to on-board controller
- Tires pressure and temperature (optional)

Options:

- external digital displays for both sides instead of lights.

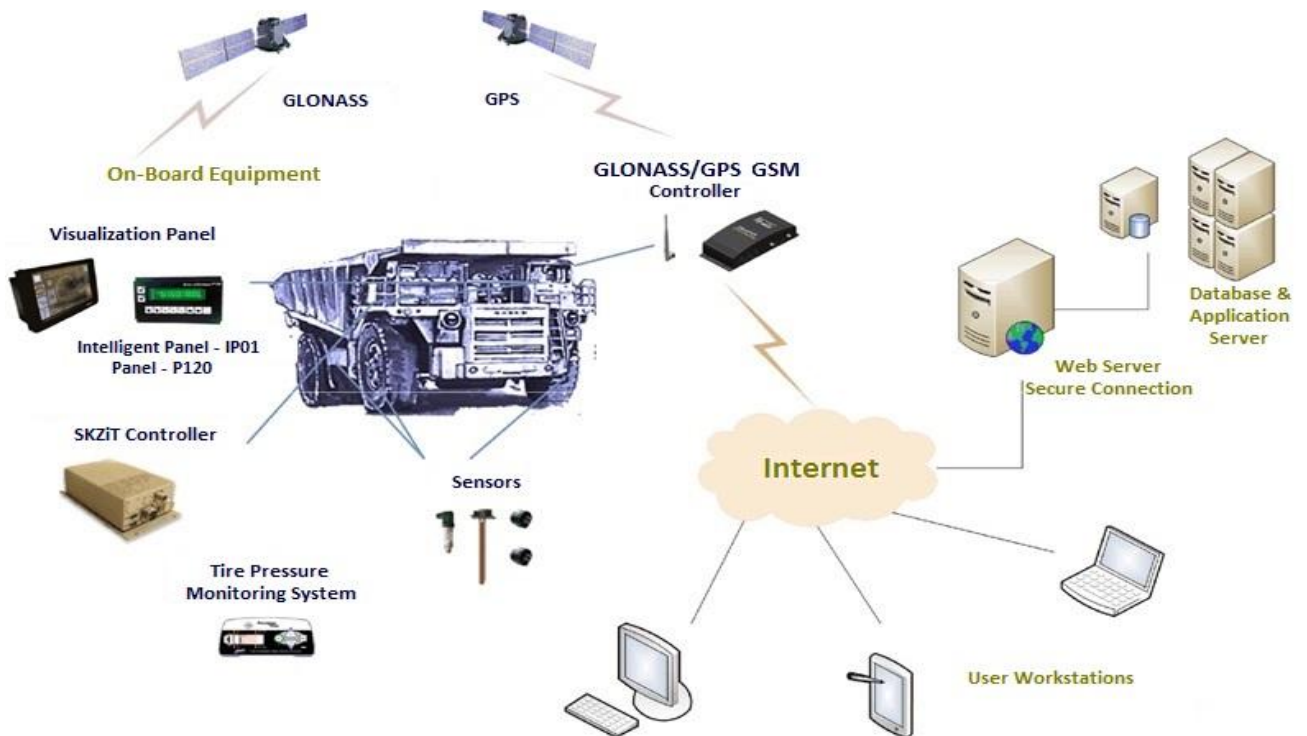


- Tires pressure monitoring system
- Tires pressure and temperature monitoring system

3. VG MineTruck kit

VG MineTruck kit includes the VG LoadPro system and GSM modem and installation kit to connect the system to web-portal to have an access to data from VG LoadPro system.

A system that allows you to monitor and control the production performance of the mining fleet, as well as displaying current state in real time and modes of operation.



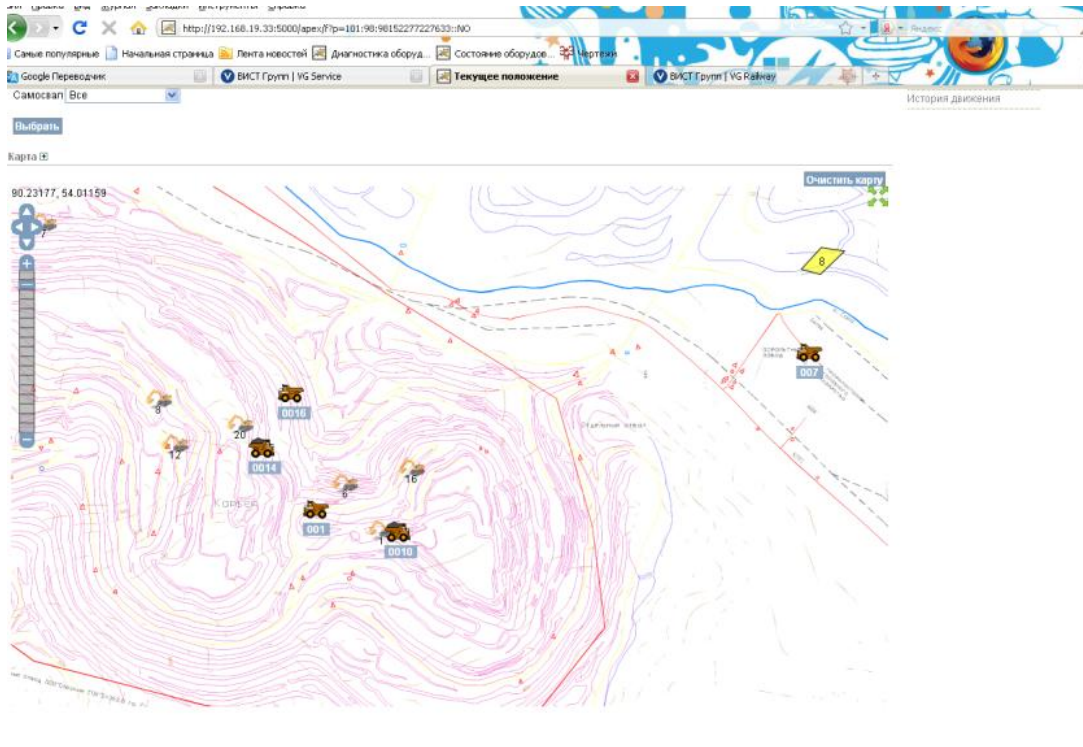
Features of the system:

- Monitoring of the position of the trucks on the map
- Trips counting including distance, weight, time of loading, unloading
- Overloads and underloads
- Fuel level and fuel consumption
- Weight of each trip
- Delays and downtime counting
- Full distance, distance with load and distance unloaded calculating
- Tires pressure monitoring
- Speed monitoring
- Reports export and e-mail reports

The mine should not install the server and maintenance it and can get access to the server using web-interface!

Examples of the VG MineTruck web-interface:

Map



Trips statistics

Отчет по угольщику **По экскаваторам**

Экскаватор < 9

Самосвал	Пункт загрузки	Дата	Начало	Окончание	Длительность (мин)	Расстояние (км)	Средняя скорость (км/ч)	Вес (т)	Сухойобъем (м³)	Топливо на начало рейса (л)	Топливо на конец рейса (л)
30	КРГ Отвал вн.	14.12.2011	08:12	08:26	13	2,56	16,3	96	245,8	1677	1635
30	КРГ Отвал вн.	14.12.2011	08:36	08:48	12	2,51	17	88	220,9	1632	1593
30	КРГ Отвал вн.	14.12.2011	08:57	09:09	12	2,48	16,1	90	223,2	1586	1547
07	КРГ Отвал вн.	14.12.2011	09:15	09:28	13	2,5	19,1	96	240	2155	2140
30	КРГ Отвал вн.	14.12.2011	09:24	09:36	12	2,47	16,3	95	234,7	1543	1504
07	КРГ Отвал вн.	14.12.2011	09:37	09:50	13	2,49	19,1	99	246,5	2100	2097
30	КРГ Отвал вн.	14.12.2011	09:56	10:08	12	2,47	16,4	100	247	1494	1461
30	КРГ Отвал вн.	14.12.2011	10:20	10:33	13	2,47	16	101	249,5	1455	1416

Количество: 8

Экскаватор < 8

Самосвал	Пункт загрузки	Дата	Начало	Окончание	Длительность (мин)	Расстояние (км)	Средняя скорость (км/ч)	Вес (т)	Сухойобъем (м³)	Топливо на начало рейса (л)	Топливо на конец рейса (л)
08	не определено	14.12.2011	08:42	09:03	21	1,22	16,5	43	62,5	1761	1752
42	КРГ Отвал вн.	14.12.2011	09:45	10:03	18	4,7	20,5	91	427,7	1576	1553
07	КРГ Отвал вн.	14.12.2011	10:04	10:25	21	4,61	19,8	102	420,2	2113	2021



Performance diagram


Диаграмма

за период с 14.12.2011 по 14.12.2011 2 смена



Sensors readings and availability

Выбрать

				GPS	GSM	Арисот		Текст. панель
								СКЗ
								iPan
								АГМП
	СКДШ	ЭЛДД	ЭПДД	ДТ	Инкл. прод.			

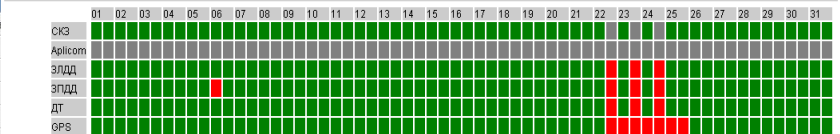
Выберите месяц год
 Выберите месяц: Октябрь
 Выберите год: 2010
 Выберите самосвал
 Самосвал: 003

Состояние датчиков

Тип оборудования	Состояние
Датчик уровня топлива	Неправен датчик уровня топлива
Арисот	ОК
GPS	ОК
GSM	ОК
Левый задний датчик давления в подвеске	ОК
СКЗ	ОК
Правый задний датчик давления в подвеске	ОК

Выбрать

Диаграмма



■ - соответствует одной смене

Fuel level and refueling

[Главная страница](#) | [Все события](#) | [Рейсы](#) | [Остановки](#) | [Превышения скорости](#) | [График уровня топлива](#) | [Загрузка журналов](#) | [Выгрузка отчетов](#) |
Ваше предприятие - Сорский ГОК

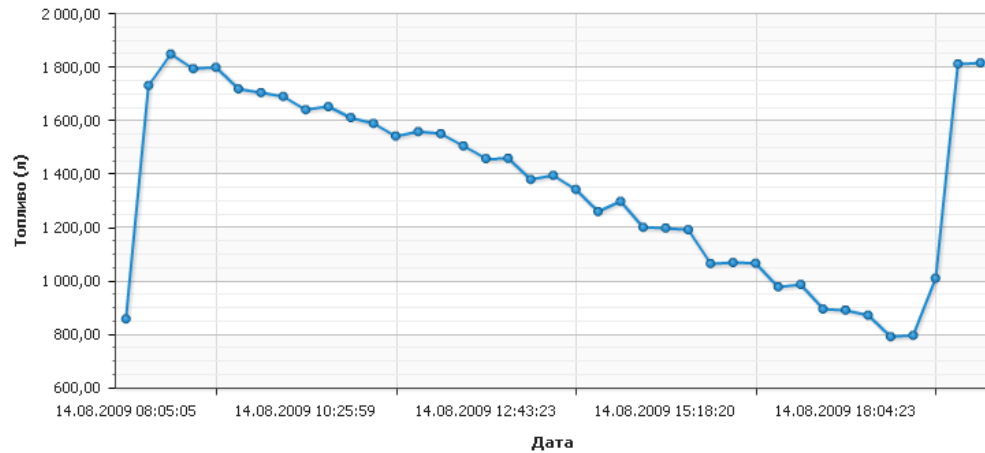
Выбор временного интервала

Выберите временной интервал
за предыдущую смену ▾

Выберите самосвал
0016 ▾

Показать

График уровня топлива



Pricing policy for dealers:

№	Description	Recommended List Price, USD	Discount price levels depending on year's volume with dealer			
			less 100k\$ per year	101k\$-300k\$	301k\$ - 500k\$	500k\$ and more
			15%	20%	25%	30%
1	VG LoadPro OEM (only for integration with dispatch or monitoring system)	7 900	6 715	6 320	5 925	5 530
	Options					
1,1	Digital display (2 pcs.)	6 400	5 440	5 120	4 800	4 480
2	VG LoadPro (internal display with touch screen and navigation)	11 000	9 350	8 800	8 250	7 700
	Options					
2,1	Digital display (2 pcs.)	6 400	5 440	5 120	4 800	4 480
2,2	Tires pressure monitoring system	2 900	2 465	2 320	2 175	2 030
2,3	Tires pressure and temperature monitoring system	9 800	8 330	7 840	7 350	6 860
3	VG MineTruck kit (VG LoadPro + GSM connection) - data available in VG MineTruck web-server)	12 500	10 625	10 000	9 375	8 750
	Options					
3,1	Digital display (2 pcs.)	6 400	5 440	5 120	4 800	4 480
3,2	Tires pressure monitoring system	2 900	2 465	2 320	2 175	2 030
3,3	Tires pressure and temperature monitoring system	9 800	8 330	7 840	7 350	6 860
3,4	Annual fee to access to web-portal VG MineTruck *	1 800	1 530	1 440	1 350	1 260

* Should be included with the sale of VG MineTruck kit

Installation (excluding trip costs)	Price for dealer USD
VG LoadPro OEM	1 800,00
VG LoadPro	2 000,00
VG MineTruck kit	2 200,00
Digital displays (2pcs)	700,00
Tires pressure monitoring system	800,00
Tires pressure and temperature monitoring system	1 600,00

Price for the customers is subject of the dealer

Sensors are installed inside the tires so the mine should provide deinstallation and installation of the tires

Trip costs shall include tickets, hotels, transfers, daily fee 100 USD per person