

Real-Time Tools for Fleet Management



CarChip Connect

- Manage your fleet in real time
- Increase driver safety and fleet efficiency
- Increase profitability through enhanced productivity

Davis 

WWW.CARCHIPCONNECT.COM

DAVIS INSTRUMENTS 2016 CATALOG

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Fleet Management Products Boost Productivity and Safety

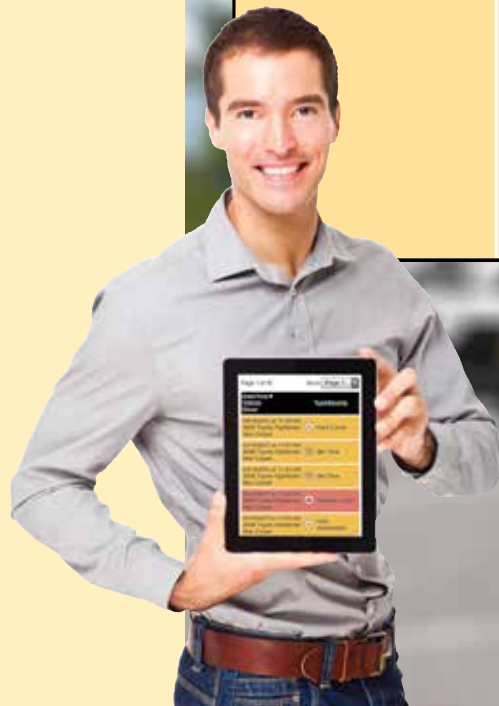
Managing a fleet requires comprehensive and accurate information. You'd like to know who's driving and how; when and where your vehicles are operating; and you want that information in a secure and accessible format.

Davis Instruments has provided fleet management solutions to companies since 1994. Our fleet management devices and analytic software make the job of monitoring your fleet easier. With these tools you can:

- Increase fuel savings with more efficient vehicle usage.
- Increase driver productivity by reducing idle time and side trips.
- Improve driver safety with the help of real-time monitoring and feedback, which can lower accident rates and potentially lower insurance rates.
- Lower vehicle maintenance costs due to less aggressive driving and timely repair of vehicles.
- Generate a rapid return on your investment through better fleet management.

Benefits of Using a Fleet Monitoring System

 Fuel Use	 Increased Productivity	 Reduced Claims (both for insurance repairs and worker's compensation)
Monitored fleets see an average of 13.2% reduction in fuel used. <i>(Source: Aberdeen Group, March 2008)</i>	Monitored fleets reported an 8% to 25% increase in completed work orders per day. <i>(Source: Aberdeen Group, March 2008)</i>	In 2007, a major insurance carrier's fleet survey showed a 37% crash reduction when monitoring driving time and a 15% speed reduction when monitoring speed. Fleet surveys by major carriers showed crash reductions around 20% when using GPS data. <i>(Source: ISO Review, Aug 2009, Managing Risk through Telematics By Steven C. Craig)</i>



Powerful cloud-based interface gives you the freedom to manage your fleet from anywhere you have internet or smartphone access.

Connect To Your Fleet in Real Time to Improve Safety and Increase Savings

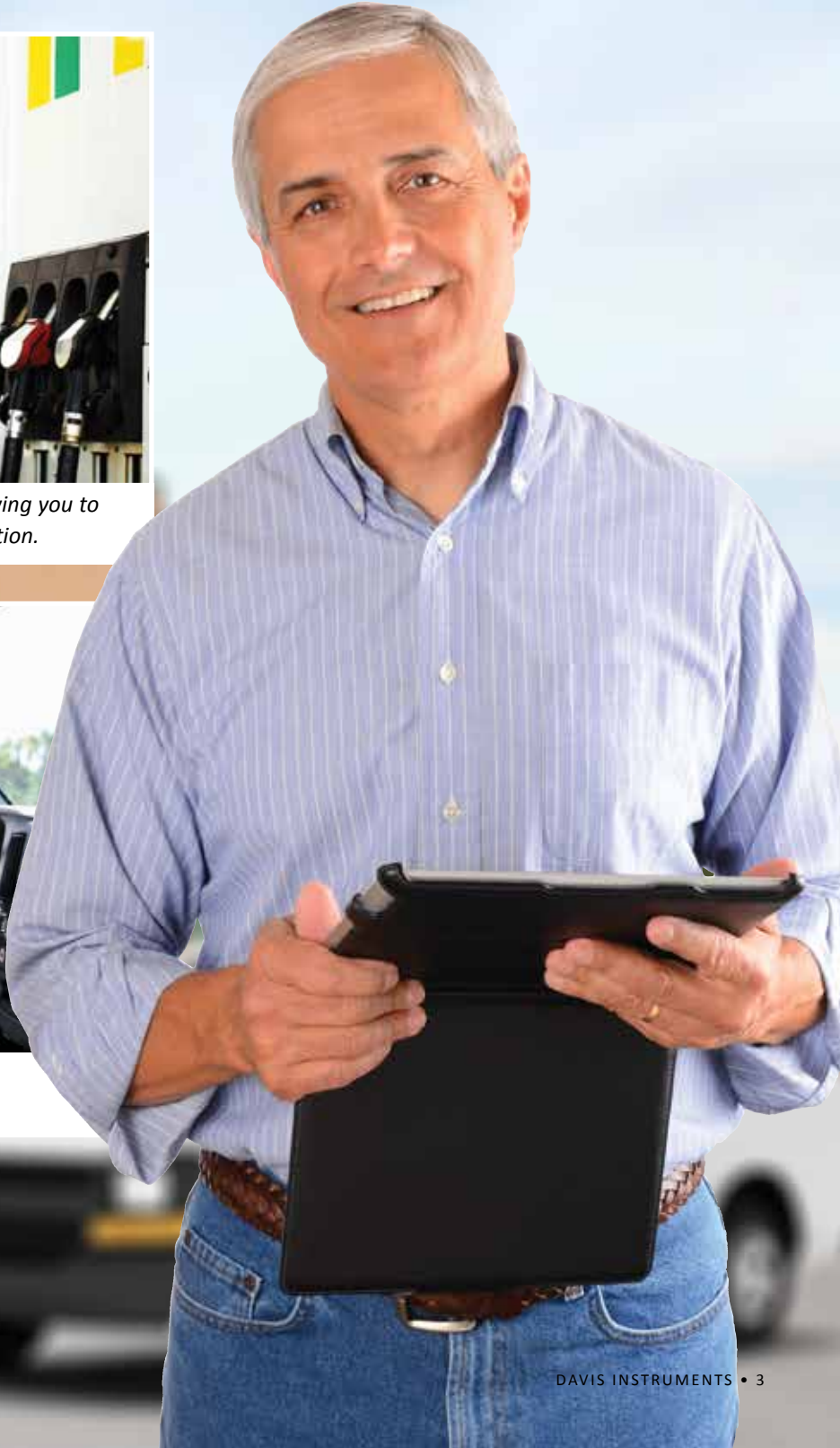
A powerful, easy-to-use fleet monitoring tool, CarChip Connect provides a complete picture of your fleet in real time. CarChip Connect is a small telematics device with GPS that plugs into a vehicle's OBD II port. Designed around the principles of efficiency, safety, location and maintenance, CarChip Connect tracks and reports data using cloud-based technology to support your management needs.



CarChip Connect monitors engine performance, allowing you to maximize vehicle efficiency and reduce fuel consumption.



Real-time monitoring and feedback can help improve driver safety and potentially lower insurance rates.



Manage Your Fleet in Real Time

Both shown actual size:
2" x 1" x 1.875" (5,1 cm
x 2,5 cm x 4,8 cm)



Installation Is Simple

Plug-and-go installation takes less than 30 seconds; just plug CarChip Connect into the OBD II port. Within minutes, the small, durable device begins securely transmitting data to the cloud-based website that is accessible from any computer or smartphone. Because CarChip Connect doesn't require a wiring harness or costly, time-consuming installation, the device is easily reassigned as vehicles rotate in and out of a fleet.

Intelligent Telematics

CarChip Connect houses its own mini-computer. The vehicle's safety settings, such as acceleration/deceleration forces and hard cornering, along with geofence locations are stored on the device. Most other devices refer to settings stored on web servers, which significantly limits how often safety parameters or geofence boundaries are checked. With CarChip Connect, you get real-time information — you don't have to rely on a GPS update interval. CarChip Connect also acts as a data logger when a vehicle goes out of mobile coverage.

Driving and GPS data are collected and stored until the device re-establishes a mobile connection.

Vehicle Location Anytime, Anywhere

See where your vehicles are by choosing the GPS update interval that meets your



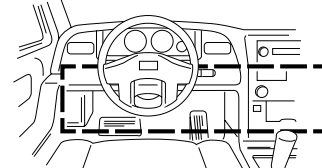
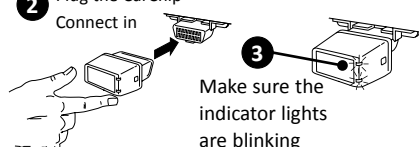
CarChip Connect easily plugs into the vehicle's OBD II port.

needs. GPS breadcrumbs are available at 1 and 5 minute intervals and/or only when an "event" occurs, depending on the service plan chosen. Events occur when a driving threshold (such as speed, braking, accelerations and decelerations) is exceeded. Combine the GPS information with geofencing and the street view option in Google Maps, and you'll know where your vehicles are at all times.

Real-Time Alerts Improve Safety and Productivity

Stay informed of your fleet's activity with selectable email alerts. Real-time alerts for excessive speed, idle time, rough road driving, geofence exit or entry and engine diagnostics provide the information you need to contact drivers immediately and

CarChip Connect Installation

- 1 The OBD II port is typically located within the boxed area shown here
- 
- 2 Plug the CarChip Connect in
 - 3 Make sure the indicator lights are blinking
- 

provide feedback. Combining awareness with the immediate reporting power of the website, you can establish driver and vehicle performance baselines for increased safety and productivity.

You can also create driver awareness by setting the onboard alarm to "beep" when the driver is exceeding speeds, acceleration, deceleration or hard cornering limits. This provides immediate feedback to drivers, coaching them to improve driving habits. Used in conjunction with reporting, managers can develop driver training programs to modify driving behavior.



Monitor your vehicles in 3-Dimensions

CarChip Connect contains a 3-axis accelerometer, allowing you to monitor motion in all directions — forward, backward, sideways and up and down. This information is combined to create a g-Bubble™. Exclusive to CarChip Connect, a g-Bubble is an invisible safety sphere that surrounds the vehicle. Hard or extreme driving events, such as hard braking or cornering, rapid acceleration, or rough road driving, that exceed a company's safety parameters will break the g-Bubble, creating an alert. Regular g-Bubble events can indicate aggressive driving and alert you to increased accident risk and more frequent repairs.

Back-up Battery Provides Unbroken Recording

CarChip Connect is powered through the OBD II port and also has its own back-up battery with a temperature regulator that helps the battery maintain an optimal charge. When the device is unplugged, CarChip Connect records and sends a final status message so you'll know immediately if the unit has been tampered with or disconnected.

Non-OBD II Compliant Vehicles

CarChip Connect can also be used in vehicles not compliant with OBD II protocols by installing the device in the diagnostic port. Once powered by this port, you have a limited feature set that includes GPS, trip distance, speeds, and more (see page 13 for a full list of supported features).

Don't Need GPS, but Still Want Real-Time Data?

CarChip Connect Basic delivers all the fleet analytics of CarChip Connect without the GPS data. You get real-time trip start and end times, alarms for hard braking, acceleration and cornering as well as high speed.

Both CarChip Connect and CarChip Connect Basic require a 1-time activation fee and a monthly service plan. For CarChip Connect, choose from GPS update frequencies of 1 minute, 5 minutes or when an event happens. CarChip Connect Basic is available with the Bronze service plan only.

8351 CarChip Connect PATENTED

Provides the most complete picture of your fleet in real time.

8352 CarChip Connect Basic PATENTED

All the features of CarChip Connect, but no GPS data. Available with the Bronze service plan only.

8390 CarChip Connect 1-time Activation Fee



How We Stack Up Against the Competition

Small but powerful, CarChip Connect is packed with many features that other comparable systems just can't provide:

- Unobtrusive, less likely to be kicked
- 3D Accelerometer
- Uninterrupted Driving & GPS Data
- Real-Time Alerts
- Onboard Alarms and Geofences
- Compact: 2" × 1" × 1.875" (5,1 cm × 2,5 cm × 4,8 cm)
- g-Bubble Monitoring
- Built-in Back-up Battery
- Cost Effective



Please see page 12 for detailed service plan features.

Powerful Web-based Analytics

Manage your fleet anytime from anywhere you have Internet or smartphone access. CarChip Connect uses mobile technology to send data to Davis' cloud-based reporting application. Users log in to a secure, company-specific site to view and manage their information. We've designed the site with multiple user designations and permission levels so you can control who has access to the information.

Customize your website

- Organize or add fleets, vehicles and drivers.
- Create geofences to define driving boundaries.
- Set parameters for speed, hard or extreme acceleration, hard or extreme deceleration, hard braking, hard cornering and time of day driving.
- Add photographs of vehicles and drivers.
- Adjust report settings to focus on the areas most important to you.



Your Fleet at a Glance

Your company-specific home page provides easy access to your fleet data. Monitor your vehicles using the map or drill down for more detailed trip information without leaving the home page. The application is customizable, allowing you to focus on what's important to the company — **all in real time.**

Choose the Summary to see an overview of your fleet, including overall fleet score, speeding, efficiency and g-Bubble data.

The screenshot shows the CarChip Connect web application interface. At the top, there's a navigation bar with 'Home', 'Manage', 'Reports', 'Settings', and 'Help'. Below this, there's a 'Location' dropdown set to 'Davis Administration Default' and a 'Fleet' dropdown set to 'SHOW ALL FLEETS'. The main content area is divided into several sections:

- LOCATION VEHICLES / LOCATION ALERTS:** A table listing vehicles with columns for 'VEHICLE / DRIVER', 'STATUS', 'SPEED', 'HEADING', and 'LOCATION'. The table contains several rows of vehicle data.
- VEHICLE DETAILS:** A section for a selected vehicle (2008 Toyota Solara) showing 'License #', 'VIN', 'Driver', 'Speed/Heading', 'Idle Time', 'Odometer', 'Emissions Report', and 'Location'.
- VEHICLE ALERTS:** A section showing alerts for a specific vehicle, including 'Event #', 'Value', 'Heading', 'Date/Time', and 'Location'.
- MAP:** A map showing the location of the selected vehicle and other vehicles in the fleet.

Access alerts for vehicles in your location or sort for alerts of a specific type.

Choose a vehicle and see a specific trip with details on the map.

See a list of recent trips with maximum speed, distance and time driven.

View vehicle emissions data for a selected vehicle.

View alerts for a specific vehicle including the date and time; type and severity; and a description of the alert.

View the location status of your whole fleet or a single vehicle on a street, terrain or satellite map.

Reports that Lead to Savings and Safety

The CarChip Connect website provides a full complement of reports to track:

- Fleet Usage and Efficiency
- Driver Safety
- Vehicle Location
- Vehicle Trip History

All reports show a vehicle or driver's score along with a summarized score for the fleet, location or company being viewed. You can also view the scores in a graph. While the reports have preset scoring, each report is customizable so you can focus on the areas most important to you.



The Big Picture

Davis' **Integrated Scorecard** compiles all the collected driving data into a single number, allowing you to see the overall performance of your fleet. The report is color-coded to let you know how drivers or vehicles are performing. The result? An easy-to-understand profile of your fleet.

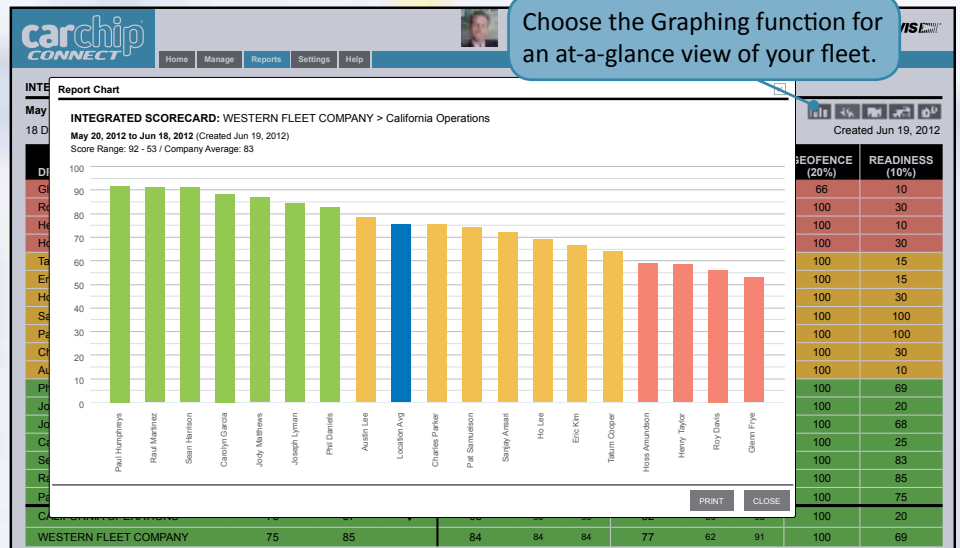
Compare with company's overall performance score.

Choose the Export Reports icon to export your chosen report.

DRIVER	CURRENT ▲	PRIOR	TREND	SAFETY (40%)	Safety Score	g-Bubble	EFFICIENCY (30%)	Speed Band	Activity	GEOFENCE (20%)	READINESS (10%)
Glenn Frye	53	52		50	17	83	40	2	77	66	10
Roy Davis	56	60	▼	52	24	80	41	5	76	100	30
Henry Taylor	58	54	▲	60	38	82	42	3	81	100	10
Hoss Amundson	59	63	▼	58	29	86	42	0	84	100	30
Tatum Cooper	64	69	▼	64	59	68	58	53	63	100	15
Eric Kim	67	79	▼	66	66	66	65	56	73	100	15
Ho Lee	69	71	▼	78	62	94	49	10	87	100	30
Sanjay Ansari	72	70	▲	72	62	82	46	58	33	100	100
Pat Samuelson	74	78	▼	78	68	88	50	0	100	100	100
Charles Parker	75	88	▼	99	98	100	39	8	69	100	30
Austin Lee	78	82	▼	87	77	96	75	57	93	100	10
Phil Daniels	83	88	▼	84	84	84	77	62	91	100	69
Joseph Lyman	84	88	▼	93	60	95	82	69	95	100	20
Jody Matthews	86	90	▼	77	73	80	97	100	94	100	68
Carolyn Garcia	88	83	▲	94	92	95	95	95	95	100	25
Sean Harrison	91	84	▲	92	90	93	88	81	95	100	83
Paul Humphreys	91	87	▲	96	96	96	81	69	92	100	85
Paul Humphreys	92	84	▲	90	86	93	97	98	95	100	75
CALIFORNIA OPERATIONS	75	87	▼	93	90	95	82	69	95	100	20
WESTERN FLEET COMPANY	75	85	▼	84	84	84	77	62	91	100	69

Alternative Presentations

If you prefer a more visual picture of your fleet's performance, use the **graphing function**. Graphs are available for scored reports and show each driver's or vehicle's color-coded score along with the fleet or location average in blue. You can quickly and easily see how your fleet is doing.



Encourage Safe Driving

The **Safety Score Report** pinpoints driving behavior that needs improvement (speed, hard acceleration and deceleration, and time-of-day driving). By decreasing the time spent speeding and avoiding rapid starts and hard stops, your drivers can reduce their accident risk while increasing the fleet's fuel efficiency.

Safety Score Report: EUROBIZ CORPORATION > Zurich Operations
 Sep 19, 2012 to Oct 18, 2012
 18 Drivers, 1 Page
 Created Oct 19, 2012

DRIVER	CURRENT	PRIOR	TREND	DISTANCE (KM)	MAX SPEED (KM/H)	% OF TIME OVER	ACCEL COUNT/100MI	DECEL COUNT/100MI	SPEED (40%)	ACCEL (20%)	DECEL (30%)	TIME OF DAY (10%)
Tobias Schneider	56	52	▲	1,355	122	0.0%	8.5	2.3	97	11	77	84
Louis Berger	76	88	▼	1,353	122	0.0%	9.6	2.4	97	0	75	84
Anna Mayer	69	71	▲	1,336	126	0.1%	2.4	0.8	91	75	91	82
Isabella Nielsen	86	90	▼	1,352	126	0.1%	2.0	0.8	91	79	91	82
Gabriel Durand	59	63	▼	1,324	127	1.2%	3.0	0.4	76	69	96	79
Allesandro De Luca	67	79	▼	138	127	1.2%	0.0	1.2	76	100	88	95
Antonio Costa	83	84	▲	1,551	127	1.1%	2.7	0.3	77	72	97	79
Sofia Hoffmann	88	83	▲	169	127	0.9%	0.0	1.0	79	100	90	93
Stefan Horvath	58	54	▲	2,802	130	2.8%	0.1	0.2	51	99	98	82
Sarah Dupont	64	89	▼	1,864	130	0.5%	1.5	1.6	79	85	83	81
Rahul Deepak	72	76	▼	2,314	130	0.2%	0.3	0.8	82	97	92	86
Daniel Moreno	78	82	▼	2,810	130	2.8%	0.1	0.2	50	99	98	82
Yanis Lakatos	84	86	▲	1,931	130	0.5%	1.2	1.5	80	88	84	82
Hugo Kowalewski	92	84	▲	315	130	3.7%	0.0	1.0	39	100	89	93
Lorenzo Martinez	91	87	▲	444	142	1.2%	2.9	0.7	54	70	92	80
Ella Saarinen	91	84	▲	1466	145	0.7%	6.6	2.2	54	32	77	80
Hans Becker	53	51	▲	867	146	1.6%	3.2	1.5	40	67	85	77
Matiide Andrade	74	78	▼	847	146	1.6%	4.0	1.3	39	59	86	77
ZURICH OPERATIONS	84	88	▼	26,739	145	0.9%	1.9	0.9	75	80	90	91
EUROBIZ CORPORATION	83	89	▼	133,698	127	0.7%	2.3	1.4	77	81	89	83

Identify Aggressive Driving

Using data from CarChip Connect's built-in 3-axis accelerometer, our unique **g-Bubble Report** measures the car's motion in three dimensions, creating a virtual bubble around the vehicle. A g-Bubble event is defined as an abrupt driving condition, such as slamming on the brakes, that takes a vehicle outside of its safety bubble. Aggressive driving is calculated based on rapid accelerations, hard braking, unsafe cornering and unusual up-and-down motion from driving too fast over speed bumps or rough terrain. Use this report along with the safety report to hone in on driver performance.

G-Bubble Report: RIVERSIDE ENERGY CORP > Midwest Division
 July 5, 2012 to Aug 4, 2012
 15 Drivers, 1 Page
 Created Aug 5, 2012

DRIVER	CURRENT	PRIOR	TREND	ACCEL RATE (PER 100MI)		DECEL RATE (PER 100MI)		CORNERING RATE (PER 100MI)		ROUGH ROAD (PER 100MI)		ACCEL 30%	DECEL 30%	CORNERING 30%	ROUGH ROAD 10%
				HARD	EXTREME	HARD	EXTREME	HARD	EXTREME	EVENTS	TIME				
Bonnie Zahara	74	78	▼	6.1	0.4	1.8	0.4	7.0	1.9	0.1	0:00	67	57	43	99
Diane Allen	76	88	▼	1.8	1.1	0.7	0.0	12.3	1.8	0.4	0:00	65	92	39	97
Daniel Jackson	78	82	▼	1.5	0.0	0.5	0.7	1.7	0.3	0.3	0:00	88	71	80	97
Alex Wong	83	84	▲	2.5	0.0	0.0	1.2	0.0	0.0	0.0	0:00	85	70	100	100
Coop Westerman	84	86	▲	0.6	0.6	0.0	0.0	0.6	0.0	0.0	0:00	80	100	91	100
Howard Anspaugh	86	90	▼	0.0	0.0	1.0	0.0	1.0	0.5	0.0	0:00	100	92	82	100
Sofia Guerrero	88	90	▲	0.5	0.0	0.5	0.3	0.5	0.0	0.0	0:00	92	87	94	100
Ricardo Mendoza	53	47	▲	2.8	0.4	1.3	0.2	10.8	1.7	0.0	0:00	75	85	28	100
Lawrence Shanberg	56	52	▲	8.5	0.0	1.8	0.5	5.8	1.7	0.0	0:00	76	78	46	100
Amelia Marshall	58	54	▲	1.3	0.2	1.4	0.3	1.6	0.3	0.0	0:00	82	58	79	100
Yunji Sakamoto	67	65	▲	0.2	0.1	0.7	0.1	0.3	0.0	0.0	0:00	87	87	94	100
Tony Costello	72	67	▲	0.0	0.0	1.2	0.0	1.2	0.0	0.0	0:00	100	95	91	100
Adam Schumacher	91	84	▲	3.8	0.2	1.1	0.2	12.0	2.1	0.0	0:00	76	85	23	100
Emma Lyndon	91	86	▲	9.6	0.0	1.8	0.6	5.7	1.8	0.1	0:00	76	77	44	100
Cameron Snider	92	84	▲	1.1	0.1	1.3	0.3	1.7	0.3	0.0	0:00	83	58	79	100
MIDWEST DIVISION	84	89	▼	2.4	0.1	0.9	0.2	2.8	0.6	0.0	0:00	86	82	71	100
RIVERSIDE ENERGY CORP	83	88	▼	1.5	0.1	1.1	0.3	2.9	0.5	0.1	0:00	83	79	76	100

Monitor Fleet Efficiency

The **Activity Report** provides an at-a-glance summary of how your fleet compares based on your company's set parameters. Your drivers will be ranked based on their cumulative scores in days driven; distance driven; top speed; the daily averages for driving, idling and stopping; and g-Bubble events.

Activity Report: LIMA ENGINEERING > Brazil Operations
 Apr 20, 2012 to May 19, 2012
 13 Drivers, 1 Page
 Created May 20, 2012

DRIVER	CURRENT ▲	PRIOR	TREND	DAYS DRIVEN	DISTANCE (MI)	TOP SPEED (MPH)	DAILY AVERAGE						
							DRIVING	IDLE	STOP	NIGHT	WEEKEND	TIME OVER	G-BUBBLE
Javier Almeida	72	76	▼	8	842	79	2:56	0:33	9:32	0:44	0:30	0:02	4.9
Tomas Silva	83	87	▼	24	1,158	81	1:16	0:29	9:01	0:27	1:15	0:00	2.4
Sarah Amesbury	56	57	▲	12	539	91	1:24	0:11	6:51	0:05	0:00	0:01	7.7
Lorena Costa	88	83	▲	1	86	79	2:27	0:32	6:17	0:06	0:00	0:02	2.0
Flavio Souza	91	84	▲	27	1,438	82	1:32	0:16	6:29	0:15	1:40	0:00	0.7
Katya Alves	92	84	▲	29	842	76	0:59	0:14	8:08	0:22	0:59	0:00	5.3
Mario Hernandez	67	79	▼	26	1,741	81	1:28	0:08	8:02	0:10	2:06	0:02	0.7
Jorge Barbosa	78	82	▼	18	830	78	1:21	0:10	7:52	0:11	0:29	0:00	1.8
Julia Morello	91	85	▲	22	984	64	1:03	0:23	7:38	0:18	0:30	0:01	0.2
Jon Azevedo	86	88	▲	7	142	57	:22	0:05	4:12	0:12	0:00	0:00	0.9
Rudra Aditi	76	88	▼	14	773	77	1:45	0:32	6:24	0:45	1:10	0:02	1.5
Miguel Oliveira	74	78	▼	24	1,256	78	2:34	0:15	9:07	0:56	2:35	0:03	1.2
Isabella Rocha	58	54	▲	17	443	83	:44	0:27	5:51	0:23	:20	0:02	5.7
BRAZIL OPERATIONS	84	88	▼	229	11,074	77	1:32	0:20	7:33	0:23	0:53	0:01	2.7

The screenshot shows the CarChip Connect web application interface. At the top, there is a navigation bar with 'Home', 'Manage', 'Reports', 'Settings', and 'Help'. The user is identified as 'PHIL DANIELS | LOGOUT'. The main content area displays an 'INCIDENT SUMMARY REPORT: WESTERN FLEET COMPANY > California Operations' for the period 'May 20, 2012 to Jun 18, 2012'. It indicates '5 Incidents, 1 Page' and was 'Created Jun 19, 2012'. Below this is a table with columns for DRIVER, VEHICLE, DEVICE, LOCATION, DATE, and TIME.

DRIVER	VEHICLE	DEVICE	LOCATION	DATE	TIME
Glenn Frye	2008 Toyota Solara	00DA123E	3470 Depot Rd, Hayward, CA 94545, USA	05/21/2012	3:57:01 PM
Glenn Frye	2008 Toyota Solara	00DA123E	2920 Baker St, San Francisco, CA 94123, USA	05/22/2012	12:17:52 PM
Henry Taylor	2011 Hyundai Sonata	00DA1395	39801 Fremont Blvd, Fremont, CA 94536, USA	05/28/2012	11:23:07 AM
Hoss Amundson	2009 Volkswagen CC	00DA1240	3470 Buskirk Ave, Pleasant Hill, CA 94523, USA	05/26/2012	2:12:34 PM
Glenn Frye	2008 Toyota Solara	00DA123E	3901 High St, Oakland, CA 94621, USA	05/28/2012	10:45:33 AM

When an Incident Happens

As careful as your drivers may be, incidents do happen. CarChip Connect acts like an airplane black box, storing detailed data that preceded the event. When you receive an incident alarm via email sent to your PC, tablet or smartphone, the **Incident Report** will show you where and when the event occurred. Click on the driver or vehicle to see second-by-second data on speed, rpm, throttle and g-force for up to 60 seconds preceding the event to determine if the driver was speeding, slowing or slamming on the brakes.

Additional Reporting Capabilities

The CarChip Connect web application hosts additional customizable reports to help track your vehicles.

- **Readiness Report:** Provides a quick view of which vehicles have active diagnostic trouble codes (DTCs), have failed the vehicle’s internal emissions test or had the CarChip Connect device unplugged.
- **Speed Band Report:** Shows total miles driven and the percent of time within defined speed bands, including idle, slow, normal, fast and speeding.
- **Geofence Report:** Encourages driving in authorized zones by logging the number of times targeted and restricted areas were entered or exited, and the daily average time spent in the defined categories of geofences.
- **Trip Summary Report:** Lists each trip taken including start time, end time, trip duration, idle time and distance driven along with the trip end location.
- **Emissions Report:** Records the emissions profile and diagnostic trouble codes (DTCs) for the vehicle each time the vehicle is started.

Which Principal Areas Are Most Important to You?

The reports present different combinations of information. By customizing your settings and choosing the reports that reflect your objectives, you can really focus your vehicle monitoring.

Report	Efficiency	Safety	Location	Maintenance
Integrated Scorecard	●	●	●	●
Safety Report		●		
g-Bubble Report		●		
Activity Report	●			
Speed Band Report	●			
Geofence Report	●		●	
Readiness Report				●
Incident Summary Report		●	●	
Trip Summary Report		●	●	
Emissions Report				●



Don't Need Real-Time Updates But Still Want Web Access?



Shown actual size: 1.80" x 1.00" x 1.32"
(46 mm x 26 mm x 34 mm)

If historical vehicle information meets your needs, CarChip Fleet Pro is a cost-effective data logging option. It offers the same easy OBD II port installation and comparable trip data as CarChip Connect Basic (no GPS) with a lower monthly service plan. Using the CarChip Connect Data Transfer Utility software (available on www.carchipconnect.com) and a USB cable, data from CarChip Fleet Pro can be uploaded to the CarChip Connect website, allowing you to utilize the site's powerful analytics and access your data wherever you have an internet connection.

With CarChip Fleet Pro You Can:

- View trip start, end and other details such as high speed and distance traveled.
- Set audible alarms for speed, hard braking and quick acceleration.
- See diagnostic trouble codes.
- Clear trouble codes and reset the check engine light.
- Check the status of the vehicle's smog-control systems with emissions readiness reports.

Add trip location information by installing the optional GPS Interface Module (see page 11). Historical GPS data is viewable on the CarChip Connect website (www.carchipconnect.com) to show trip start and end locations. *Please note: Hard cornering and rough road reporting is only available with CarChip Connect.*

Both CarChip Fleet Pro and CarChip Fleet Pro equipped with GPS require a 1-time activation fee and a monthly service plan. See page 12 for details.

8246 CarChip Fleet Pro PATENTED

CarChip Fleet Pro also works with our PC-based FMS software. See our *Innovative Tools for Fleet Management* catalog for details.

8391 CarChip Fleet Pro Activation Fee

Activation fee is required for each CarChip Fleet Pro uploading to CarChip Connect's cloud-based application.

Components for Historical Cloud-based Reporting		
	No GPS	GPS
8246 CarChip Fleet Pro	•	•
8251 GPS Interface Module (optional)		•
8128 GPS Module (optional)		•
8391 1-time Activation Fee	•	•
8432 CarChip Connect DTU CD	•	•
8433 CarChip Fleet Pro Upload Cable*	•	•

* Only one CarChip Fleet Pro Upload Cable is needed per office or fleet location. CarChip Connect DTU is available as a free download from www.carchipconnect.com.



Optional Accessories Provide GPS



GPS Module

Provides historical GPS data for each trip. The GPS Module plugs quickly and easily into the GPS Interface Module. For maximum visibility to GPS satellites, position the GPS Module on the dashboard or windshield.

8128 GPS Module

Includes a 6.5' (2 m) cable to connect to the GPS Interface Module.



GPS Interface Module

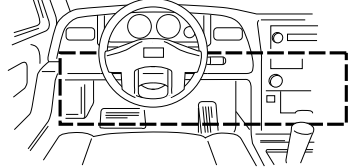
Connects the GPS Module to the CarChip Fleet Pro data logger. You'll need one Interface Module per vehicle. Easily mounts under the dashboard.

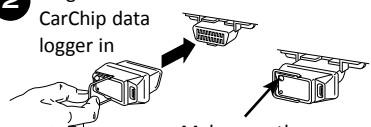
8251 GPS Interface Module for CarChip Fleet Pro

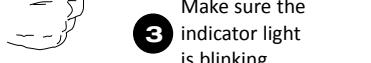
Includes a 2.5' (0,7 m) cable to connect to CarChip Fleet Pro.

CarChip Fleet Pro Installation

- 1** Locate the OBD II port in your vehicle


- 2** Plug the CarChip data logger in


- 3** Make sure the indicator light is blinking



More than a Data Transfer Utility

Davis' Windows-based DTU provides more functionality than just transferring data from CarChip Fleet Pro to the cloud. Drivers can easily upload their data and view the device settings. Fleet managers can centrally manage the device settings through the website and the DTU will push the new settings to the CarChip Fleet Pro after data has been uploaded.

8432 CarChip Connect DTU CD

Use one DTU per office or fleet location. Available as a free download from www.carchipconnect.com.

8433 CarChip Fleet Pro Upload Cable

Use one upload cable per PC, tablet or office/fleet location.



Mixing your fleet?

CarChip Fleet Pro and CarChip Connect can be used together on the CarChip Connect website. However, not all the reports are fully compatible with CarChip Fleet Pro. Please refer to the table at right to see which reports you would need to customize to better compare vehicles using CarChip Fleet Pro with those using CarChip Connect.

Report	CarChip Fleet Pro	CarChip Fleet Pro with GPS	CarChip Connect	CarChip Connect Basic
Safety Score	●	●	●	●
g-Bubble	●	●	●	●
Speed Band	●	●	●	●
Activity	●	●	●	●
Geofence	●	●	●	●
Readiness	●	●	●	●
Integrated Scorecard	●	●	●	●
Incident	●	●	●	●

● Data not available. Geofence tracking is not available on CarChip Fleet Pro; CarChip Connect Basic does not have GPS.

● Partial compatibility. Cornering and vehicle down time data is unavailable on CarChip Fleet Pro.

● Reports are fully compatible.

Choose From Six Different Service Plans

Each CarChip Connect device requires a 2-year service plan agreement and is subject to a 1-time activation fee. Select the Platinum, Gold or Silver plan based on how frequently you want updated GPS data; for no GPS data select the Bronze plan. Each of these plans will notify you in real time when any of your alert conditions are exceeded.

Each CarChip Fleet Pro uploading data to the CarChip Connect website requires a 1-year service plan agreement and is subject to a 1-time activation fee. Choose the Nickel plan if you have GPS or the Copper plan for no GPS data. Copper and Nickel plans are billed as an annual fee.

Service Plan Features And Pricing Summary						
Plan	CarChip Connect				CarChip Fleet Pro	
	Platinum	Gold	Silver	Bronze (No GPS)	Nickel	Copper (No GPS)
Monthly price	Call*	Call*	Call*	Call*	Call**	Call**
Scheduled Update – includes GPS and Driver Data	1 minute	5 minutes	At trip start/end			
Scheduled Update – Driver data only				At trip start/end		
Event-driven Updates With GPS	●	●	●			
Event-driven updates Without GPS				●		
Geofences	●	●	●			
“Find Me Now” option limits (per month)***	100 per vehicle	60 per vehicle	30 per vehicle			
Data Upload to Web						●
Data with GPS Upload to Web					●	

* Price based on average vehicle usage of less than 35 hours per week. For vehicles and fleets with average vehicle usage of more than 35 hours per week, add 15% to the service fee. A 30-day notice will be given before a new rate takes effect.

** Billed as an annual fee.

*** Currently not available in Canada and South America.



Feature Comparisons			8351	8352	8246	8246 + 8251 + 8128
For CarChip Connect and CarChip Fleet Pro			CarChip Connect	CarChip Connect Basic	CarChip Fleet Pro no GPS	CarChip Fleet Pro with optional GPS
FEATURES & OPTIONS	Components	Data logger	●	●	●	●
		Optional Interface and GPS modules				●
	Annual Service Plans	Platinum	●			
		Gold	●			
		Silver	●			
		Bronze	●	●		
		Nickel				●
		Copper			●	
	Activation Fee	1-time activation fee	●	●	●	●
	Installation	Plugs into OBD II connector	● ▲	●	●	●
		Typical installation time	30 seconds	30 seconds	30 seconds	20 minutes
		For model years	1996 and later	1996 and later	1996 and later	1996 and later
		For cars, vans, and pickup trucks	● ▲	●	●	●
	Upload to Computer	Via cellular connection to website	● ▲	●		
		Via USB cable and Data Transfer Utility from PC to website			●	●
	Backup Battery	Battery type	Lithium-ion	Lithium-ion	Non-replaceable coin-cell	Non-replaceable coin-cell
		Expected battery life if unit not installed in vehicle	7+ years	7+ years	3–5 years	3–5 years
		Expected battery life under normal usage	7+ years	7+ years	10–15 years	10–15 years
DRIVER PERFORMANCE	Acceleration & Deceleration	Hard accelerations	●	●	●	●
		Extreme accelerations	●	●	●	●
		Hard decelerations	●	●	●	●
		Extreme decelerations	●	●	●	●
		Hard cornering	●	●		
		Extreme cornering	●	●		
		Onboard three-axis accelerometer	●	●		
		Onboard alarms for hard accelerations and decelerations	●	●	●	●
		Vertical or up & down motion (Rough Road)	●	●		
	Accident Log	Automatic detection of accident with speed and tachometer info every second for 60 seconds before accident	●	●		
		After extreme deceleration, speed every second for the last 20 seconds before a complete stop			●	●
	Distance	Distance traveled per trip	● ▲	●	●	●
	GPS	GPS position logging	● ▲			●
	Trip Time	Starting and ending time for each trip	● ▲	●	●	●
		Total elapsed time for each trip	● ▲	●	●	●
		Engine idle time	●	●	●	●
		Weekend/night driving time	● ▲	●	●	●
	Speed	Top speed	● ▲	●	●	●
		Average speed	● ▲	●	●	●
		Time over safety limit for speed	● ▲	●	●	●
		Time within user-specified speed ranges	● ▲	●	●	●
		Onboard alarm for high speed	● ▲	●	●	●
	ENGINE	Diagnostic trouble codes	●	●	●	●
		Ability to reset “check engine” light	●	●	●	●
SECURITY	Encrypted data transfer	● ▲	●	●	●	
	Immediate tamper notification	● ▲	●			

▲ Supported features in non-OBD II compliant vehicles

* Billed as an annual fee.



Cost Savings Calculator

CarChip Connect can significantly reduce the cost of operating a single car or a fleet of vehicles. ROI comes in the form of fuel savings, productivity improvements, fewer accidents, lower maintenance costs and improved customer satisfaction.

Use the online ROI calculator at carchipconnect.com or this form to determine how much money your company might

save each year. We've provided an example to illustrate your potential savings.

This example is based on a hypothetical fleet of 100 vehicles that each complete 26 work orders weekly. The average driver cost is \$23.50/hour. The company experienced 3 accidents in the past year that averaged \$13,000.**

Calculate Your Annual Fuel Savings:

	EXAMPLE	YOUR DATA
Number of vehicles in fleet	× 100	
Average yearly kilometers per vehicle	÷ 29,000	
Approximate km per liter	× 10	
Average cost of fuel, per liter	× \$1.00	
Expected fuel economy improvement*	13.2%	
Fuel Savings per Year:	\$38,280	

Calculate Your Potential Insurance Savings:

	EXAMPLE	YOUR DATA
Annual insurance cost of all fleet vehicles	× \$80,000	
Expected reduction of insurance rates (Commercial Insurance)*	15%	
Commercial Insurance Savings per Year:	\$12,000	

Calculate Your Productivity Improvement:

Note: You can enter either the number of weekly orders completed AND expected increase in work orders completed AND average revenue per work order; **OR** employee efficiency improvement AND the number of drivers in vehicles AND driver hourly cost.

If your drivers complete service orders:	EXAMPLE	YOUR DATA
Number weekly work orders completed	× 2,600	
Average revenue per work orders	× \$70	
Weeks worked in one year	× 50	
Expected increase in work orders completed*	8%	
Total Productivity Improvement per year:	\$728,000	
OR if your drivers only drive:		
Driver hourly cost	× \$23.50	
Average hours worked per year	× 2,000	
Number of drivers in vehicles	× 100	
Employee efficiency improvement*	10%	
Total Productivity Improvement per Year:	\$470,000	

Grand Total Annual Savings

CarChip Connect saves your company money by identifying and reducing money wasting activities.

	EXAMPLE	YOUR DATA
Fuel Savings	\$38,280	
Productivity Improvement	\$470,000	
Insurance Savings	\$12,000	
Total Savings	\$520,280	

* Data Source: The Aberdeen Group, March 2008

** Examples shown using American currency.

Limited Warranty

We warrant our products to be free of defects in material and workmanship for two years from the date of original purchase. While we make every effort to carefully manufacture our products to the highest standards of quality, occasionally parts may be found to be missing, defective or damaged.

If you have a defective part, return the product to us, shipping charges prepaid. Include proof of purchase and a written explanation of the trouble. During the warranty period, we will, at our option, either repair or replace the product free of charge. This warranty does not cover damage due to improper installation or use, negligence, accident, or unauthorized service or to incidental or consequential damages beyond the Davis products themselves. Implied warranties are limited in duration to the life of this limited warranty.

Some states do not allow limitations on how long an implied warranty lasts, or the exclusion or limitation of incidental or consequential damages, so the above limitations may not apply to you. This warranty gives you specific legal rights. You may have other rights, which vary from state to state and country to country.

Important Safety Notice

CarChip Connect and CarChip Fleet Pro have been carefully designed and tested to comply with the OBD II protocols used on vehicles sold in the USA, model-year 1996 or later. However, some vehicle models are not in full

compliance with these protocols. In addition, the computer control systems and sensors on any given vehicle may be malfunctioning or out of specification. If you have concerns, it is wise to consult a licensed auto mechanic or service center before installing any aftermarket product.

While our testing and the experience of thousands of CarChip Connect and CarChip Fleet Pro users have shown the units to be safe and reliable, there is an inherent risk in adding any aftermarket product that may potentially affect the operation or drivability of your vehicle. Should you be concerned about the operation of your vehicle at any time while using any of our products, you should pull off the roadway immediately or as soon as it is safe to do so. Remove the unit from the OBD II port, and consult a licensed mechanic or automobile service center. For an in-depth discussion of OBD II anomalies, we recommend The Equipment and Tool Institute’s website at www.etoools.org.

Should you experience any issues or have concerns, please contact our Technical Support Department at (510) 732-7814 or support@carchipconnect.com, Monday through Friday, 7:00 a.m. to 5:30 p.m. Pacific Time. We maintain an active database of the feedback we receive; your comments help us continuously improve the product.

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Davis Instruments Quality Management System is ISO 9001 certified.

A Note for Our International Customers

OBD II onboard diagnostics became mandatory for all cars, pickups and vans manufactured for sale in the US and Canada beginning with model-year 1996. In Europe, OBD II compliance became mandatory for all passenger vehicles beginning with model-year 2001 (petrol) and model-year 2004 (diesel). OBD II compliance became mandatory for light commercial vehicles beginning with model-year 2002 (petrol) and model-year 2007 (diesel).

Many vehicles manufactured elsewhere are also OBD II-compliant. Both CarChip Connect and CarChip Fleet Pro will work with these vehicles as well. However, there is no easy way to tell which vehicles are OBD II compliant and which are not, even if the vehicle appears to have the proper connector. If you want to use CarChip Connect or CarChip Fleet Pro, we suggest purchasing a demo unit to test in your fleet before committing to a larger purchase.

Data Storing Capacity

Hours of data stored varies depending on the logging interval.

Product	Plan	Logging Interval			Approximate Driving Hours Data Storage
		Speed	GPS Location	Engine Parameters	
CarChip Connect Data stored when mobile service is unavailable.	Platinum	1 minute	1 minute		30 hours
	Gold	5 minutes	5 minutes		130 hours
	Silver	If threshold exceeded	At trip start/end or with an event		600 hours
	Bronze	If threshold exceeded			600 hours
CarChip Fleet Pro Maximum storage time before data is overwritten. GPS logging requires optional components.	Nickel	5 seconds	60 seconds	60 seconds	520 hours
	Copper	5 seconds	Not logged	Not logged	1200 hours



Three reasons why CarChip Connect is the best tool to manage your fleet:

- 1 Small:**
Small in cost, heavy in features.
- 2 Easy:**
Installs in seconds by plugging into the vehicle's OBD II port. Moves easily from vehicle to vehicle.
- 3 Powerful:**
Intelligent telematics and customizable cloud-based reporting provide comprehensive real-time vehicle monitoring — all at a competitive price.

