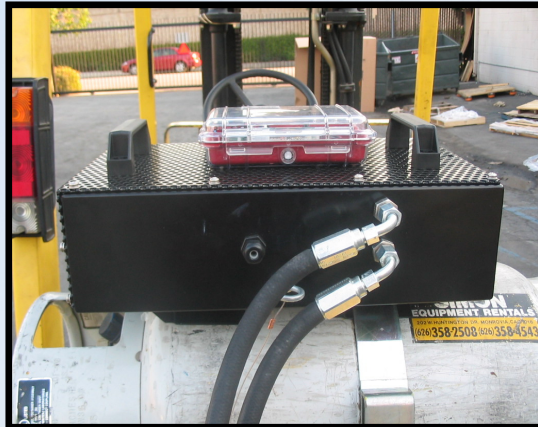


LP Meter

IC Vehicle Energy/Usage Meter



Applications:

- Fleet Fuel Consumption
- IC Truck Efficiency Comparison
- IC to Electric Truck Conversions

Features:

- Portable & Convenient to Ship
- Installs in Minutes
- Memory Card for Easy Data Transfer

The LP Meter measures energy usage on propane-powered forklift trucks. It measures and records gas flow every ten seconds using an internal flow meter and real time clock. Data is recorded onto an internal memory card. Real time data includes engine on/off status and propane flow rate while daily data includes accumulated propane usage and run, idle and Key off times. The data is typically collected over a one week period but the meter can hold up to two months worth of data.

LP Meter captures the Fuel Consumption and Usage Data without the hassle of manual data collection by operators or maintenance staff.

In most places, the zero emission electric forklifts are the preferred material handling equipment. However, IC vehicles still comprise over 45% of new forklift sales due to lower capital costs and perceived performance advantages. OSHA, local air quality boards, and corporate management are increasing pressure on local facilities to replace their IC forklifts with electric equivalents. At present there is no analytical method to “size” electric forklifts, their corresponding batteries, and the charging equipment required in order to replace an IC fleet. The current preferred method is to place a demonstration vehicle in the place of an IC vehicle and to evaluate its performance vis-à-vis the workload. Limitations of the “demo method” include disruptions to the operation, high cost to demo and vehicle operators using the demo unit less in favor of the familiar IC equipment. The IC Meter, on the other hand, will cost-effectively and unobtrusively gather data to precisely size an electric vehicle fleet.

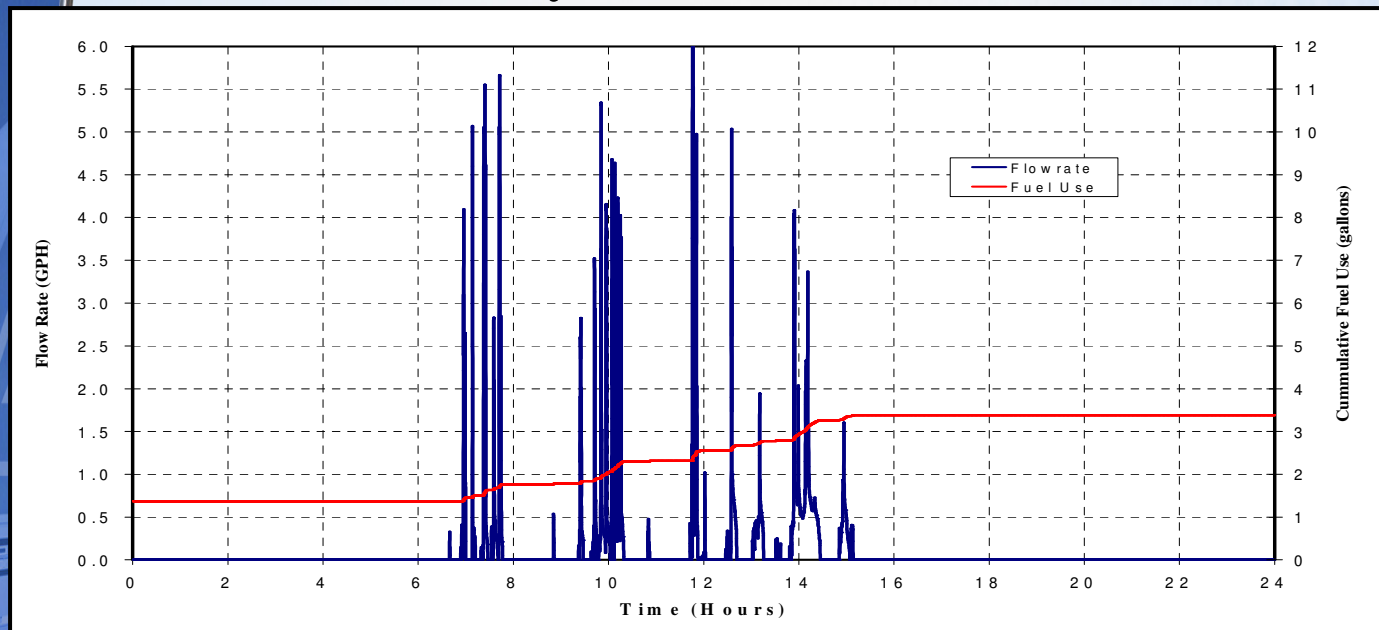


LP Meter IC Vehicle Energy/Usage Meter

Real Time Data

Time	Status	Date	Index	Flow rate gph	US Gal	Vbat	Engine ON
10:38:53	E0	3/20/2008	500400	0.00	4.77	12.91	0
10:39:03	E0	3/20/2008	500410	0.00	4.77	12.91	0
10:39:13	E1	3/20/2008	500420	0.01	4.77	10.56	0
10:39:23	E1	3/20/2008	500430	0.19	4.77	14.66	1
10:39:33	E0	3/20/2008	500440	0.26	4.77	14.66	1
10:39:43	E0	3/20/2008	500450	0.44	4.77	14.71	1
10:39:53	E0	3/20/2008	500460	0.06	4.77	14.69	1
10:40:03	E0	3/20/2008	500500	0.30	4.77	14.78	1
10:40:13	E0	3/20/2008	500510	4.35	4.79	14.93	1

Daily Real Time Data



Daily Summary

Date	US Gallons	Work (kWhs)	Key ON (hrs)	Key OFF (hrs)	Run Time (hrs)	Idle Time (hrs)	Charge Time (hrs)
3/18/2008	13.1	57.2	15.2	8.8	14.5	9.5	9.1
3/19/2008	14.5	63.4	15.5	8.5	14.6	9.4	8.8
3/20/2008	18.3	80.0	17.6	6.4	16.6	7.4	7.0
3/21/2008	11.0	48.1	13.1	10.9	12.0	12.0	11.4
3/22/2008	0.0	0.0	0.0	24.0	0.0	24.0	24.0

