

Repeated measurement of section fuel consumption during actual driving

Measurement items: Travel distance, elapsed time, interval mean velocity, total mean velocity, time required for interval, interval fuel consumption, cumulative fuel consumption, interval fuel economy, cumulative fuel economy

Other applicable test: Constant-Speed Fuel Consumption Test (TRIAS99-004-01), pattern-mode fuel consumption test

Purpose

Taking advantage of the compact and lightweight speedometer, the LC-8300A, mount it on a motorcycle to measure mean velocity, fuel consumption, and fuel efficiency every 10 m from the start. From the results, the fuel efficiency will be evaluated.

Overview

【Measurement procedure】

First, install a GPS speedometer, a fuel flow meter and a flow detector on the motorcycle.

Next, press the measurement start button on the LC-8300A, then drive the motorcycle.

The mean velocity and fuel consumption are measured every 10 m of travel distance, and the continuous interval fuel consumption is calculated.

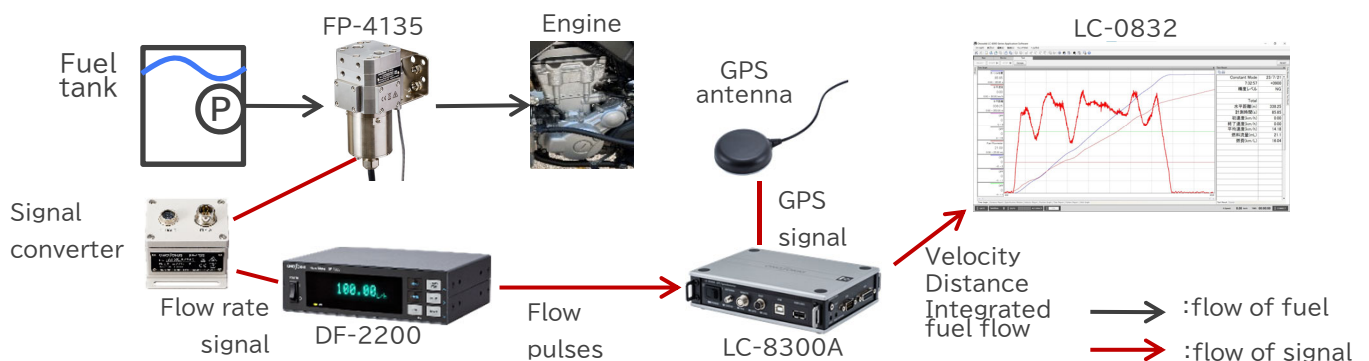
After driving the specified distance, press the measurement stop button to complete the measurement.

*This measurement was done on our premises.

【Measurement image】



【System configurations】



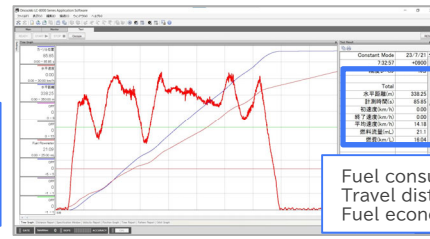
Measurement results(LC-0832 Fuel Consumption Test function)

You can check the list of interval data in the Distance Report.

区間 No.	区間開始時刻	区間終了時刻	区間距離 (km)	区間平均速度 (km/h)	区間平均燃料消費率 (L/100km)	区間平均燃費 (km/L)	区間燃料消費量 (L)	区間燃料消費量 (mL)
000001	00:00:00	00:00:10	0.100	10.0	10.0	10.0	0.010	10.0
000002	00:00:10	00:00:20	0.200	20.0	20.0	20.0	0.020	20.0
000003	00:00:20	00:00:30	0.300	30.0	30.0	30.0	0.030	30.0
000004	00:00:30	00:00:40	0.400	40.0	40.0	40.0	0.040	40.0
000005	00:00:40	00:00:50	0.500	50.0	50.0	50.0	0.050	50.0
000006	00:00:50	00:01:00	0.600	60.0	60.0	60.0	0.060	60.0
000007	00:01:00	00:01:10	0.700	70.0	70.0	70.0	0.070	70.0
000008	00:01:10	00:01:20	0.800	80.0	80.0	80.0	0.080	80.0
000009	00:01:20	00:01:30	0.900	90.0	90.0	90.0	0.090	90.0
000010	00:01:30	00:01:40	1.000	100.0	100.0	100.0	0.100	100.0

Every 10 m
interval mean velocity
interval fuel flow rate
interval fuel economy

You can easily check the results at the measurement in the Time Graph.



Fuel consumption: 21.1 mL
Travel distance : 338.25 m
Fuel economy :16.04 km/L

Summary

By the measurement of combining the On-board Volumetric Flow Detector FP-4135 and the GPS Speedometer LC-8300A, you can mount them on a motorcycle and perform the fuel consumption test easily.

We support vehicle development by providing measurement systems that allow stable testing even on actual roads.

* Contents of this document may change without prior notice.