



Simret.ic

In-Cab Brake Performance Testing

- **Permanently fitted in-cab**
- **Quick and simple one-button driver brake testing**
- **Pass-Fail lights with adjustable threshold and test lifetime to suit vehicle**
- **Repeater lights to warn other users of brake test status**
- **Suitable for heavy vehicles and mine locomotives**



Simret (Safety In Mines RETardometer) was originally developed by the UK Health and Safety Executive to measure the brake performance of heavy vehicles and mine locomotives. The new Simret In-Cab is the latest development of this technology by Turnkey Instruments.

Simret.ic has been designed to allow drivers to test the brake performance of their vehicles or locomotives during the course of their working shift. This is done by pushing a single button whilst the machine is stationary. A bright blue light illuminates to confirm when the **Simret.ic** is ready. The driver then simply accelerates to the recommended test speed and applies the brakes to bring the machine to a stop[†].

Simret.ic automatically calculates the brake performance and will illuminate a bright green light if the brakes have passed the test or a red one if they have failed. Brake tests can be repeated as often as required.

[†] Always use a safe and designated test area for brake testing





The pass-fail lights will remain illuminated (whenever the vehicle is running) for a preset period between 1 hour and 10 days. Brakes should be re-tested when the lights go out. Additional repeater lights can be fitted to the outside of the vehicle to indicate to management that it has been tested recently.

Simret.ic is housed in a sturdy plated steel case with lockable door. The case is hose-proof to IP66. Behind the door is the engineer's control panel. This is not accessible by the plant operator. The control panel allows the vehicle mechanic to set up the instrument, perform more brake tests and download or print out test results. Up to 99 driver or engineer tests can be saved in memory.

A graphical display allow the engineer to view diagnostic graphs of the vehicle deceleration, speed and stopping distance during the brake tests. Tests can be downloaded without turning the vehicle ignition on.

An encapsulated bi-axial deceleration sensor measures the deceleration of the vehicle together with any sideways pull during brake testing. This sensor can be located at any convenient location in the vehicle and communicates digitally with the control box.

The decelerometer is factory calibrated and it should be inter-changed annually with a re-calibrated one. This makes servicing and maintenance quick and straight forward, the lights on the control box flash to warn when re-calibration is overdue.

E&OE. Product development is continuous and Turnkey Instruments reserves the right to make changes to specification and manufacture without notice.



Simret.ic features

- Turns on and off automatically with vehicle power
- Sturdy, hose-proof IP66 case
- Engineer's control panel behind lockable door
- 99 test memory with facilities to download and print out results
- All tests are time and date stamped
- Internal battery to allow results to be viewed and downloaded without vehicle power
- Quick annual recalibration by interchanging sensor
- Automatic warning when recalibration overdue

