



### Customer Requirements

A car seat manufacturer is required to monitor and test their products during the manufacturing process. These seats reposition themselves automatically to either the driver's or passenger's preferred setting, have to be manufactured to strict standards. The seat is required to be put through a full range of movements to ensure operation to specification and without fault. The current test procedure includes manually testing a random sample, where if one seat in a batch failed then every seat of that batch would need to be manually tested. This has proven too costly at times so the manufacturer now requires an automated testing solution that processes each seat and produces a printed report of the test results.

### dataTaker DT80

- 1 A cost effective data logger expandable to 100 channels, 200 isolated or 300 single-ended analog inputs
- 2 Built-in web and FTP server allows for remote access to logged data, configuration and diagnostics
- 3 Modbus slave and master functionality allows connection to Modbus sensors and devices and to SCADA systems
- 4 Smart serial sensor channels capable of interfacing to RS232, RS485, RS422 and SDI-12 sensors
- 5 Rugged design and construction provides reliable operation under extreme conditions
- 6 Includes USB memory stick support for easy data and program transfer



### Complex comfort:

Electronic car seats must be tested to comply with strict standards. Valuable time can be saved by automating and logging the tests using a dataTaker data logger.

### dataTaker Solution

#### Equipment

dataTaker DT80 data logger  
ASCII Printer

#### Sensors

Current Sensors  
Position Sensors

#### Implementation Notes

The dataTaker DT80 can accept the analog signals read from current and position sensors attached to the seat's circuitry. Whilst the seat is being put through the full range of movements on the production line, the DT80 can record the seat position and current over time to determine whether the seat is working to specification and to ensure that the whole circuit is without fault. The DT80 may also be programmed to print a performance report for each seat via an ASCII printer connected to the serial host-port. Using this proposed system, it is possible to immediately identify any seat which is not operating to the strict standard.

Further to this, the dataTaker can hold up to 10,000,000 samples which allows for a large history of test reports to be stored within the logger itself for later review.

The automated seat testing is not only more efficient than the pre-existing manual testing, but it ensures that every seat is tested instead of a random sample, preventing failures due to untested stock.