

DTCO 1381

Digital Tachograph



www.siemensvdo.com

The DTCO 1381 digital tachograph

The DTCO 1381 EU digital tachograph sets new standards in terms of performance, technology, design and tamperproofing. It allows data, such as driving and rest times, speed and rpm, as well as information needed for calibration, to be digitally recorded.

The DTCO 1381 fits into a standard 1-DIN radio slot and consists of a recording unit with mass memory, two smart card readers, an integrated printer and display.

In conjunction with the intelligent KITAS 2171 speed sensor and the necessary tachograph cards, the DTCO 1381 meets all the requirements of Regulation (EC) No. 1360/2002, the new directive.

Data relating to the vehicle is stored in an integral mass memory with capacity for recording activities for approx. 365 days.

Driver-related data is stored on a personal driver card (smart card) inserted into the digital tachograph before each journey or shift begins.

The DTCO 1381 has interfaces for connecting to on-board electronics or an instrument cluster (electronic speedometer). Mass memory data can be downloaded via the front interface, which is also used to calibrate the system (note that only authorised service partners are permitted to perform system calibration). It is exceptionally easy to evaluate and store this digital data for e.g. business management purposes, with Siemens VDO offering appropriate solutions such as the TIS-Office software and the TIS-Web Internet evaluation service. Furthermore, the DTCO 1381 features an "info interface" which can forward recorded data continuously to an on-board computer.

Fully compliant with EU directive 1360/ 2002, the DTCO 1381 is an innovative system component which can easily be integrated into solutions based on advanced vehicle technologies.

SIEMENS VDO

DTCO 1381

Digital Tachograph

System components of the new digital tachograph (DTCO 1381)

The radio slot-sized DTCO 1381 includes 2 smart card readers, a printer, a display, a real-time clock, operating controls and a data storage facility. In conjunction with the intelligent KITAS speed sensor and the requisite tachograph cards, the DTCO 1381 meets all the requirements of the new directive. The DTCO 1381 can also be optionally connected to an analogue speed indicator or an instrument cluster.

Data recording

The DTCO 1381 records driving, work, availability and break/rest times for the driver and crew, the speed and distance travelled, specific parameters such as rpm, and other work processes and events related to the vehicle. The data relating to the vehicle is stored in the integrated memory, while driving and rest times are additionally stored on personal driver cards.

The capacity of the system memory is sufficient to record all activities for approximately 365 days. The driver cards hold approximately 28 days of driver activity.

Access rights/data protection

Special tachograph cards are used in the DTCO 1381 to comply with data protection requirements and ensure security. Fleet operators can protect their data against unauthorised access with a company card. Enforcement officers require a control card to access the system. Authorised workshops can activate the calibration function of the DTCO 1381 using their workshop card.

Functionality/options

- | Various display colours
- | Possible to fit different buttons and screens
- | Fully automatic smart card readers
- | More than 20 EU languages available
- | Easy to change the paper roll – no manual feeding required
- | Menu text – not just symbols
- | 2 status inputs
- | CAN diagnostics or CAN instrument interface
- | K-Line diagnostics
- | Rpm profile and speed profile
- | Warning signal after 4 hrs 15 mins driving time
- | Info interface for on-board computer or other telematics systems

Technical specifications

- | Installation dimensions: 178 mm x 50 mm x 150 mm (w x h x d), 1-DIN radio slot format
- | Operating voltage: 24 V, optional 12 V
- | Measuring range: 0 to 220 km/h
- | Operating temperature: -25 °C to +70 °C
- | Storage temperature: -40 °C to +85 °C
- | Pulse range: 4,000 to 25,000 pulses per km
- | Clock: real-time clock based on UTC time
- | Inputs: KITAS 2171, n sensor, additional inputs
- | Outputs: 2 x v pulse; 1 x 4 pulses/m
- | Accuracy:
 - Speed: ± 1 km/h
 - Distance: ± 1%
 - Time: ± 2s per day
- | Weight: approx. 1,200 g

Interfaces

- | CAN interface for system and vehicle
- | Interface for smart sensor
- | 6-pin interface for programming, calibration and data download
- | Signal output (v pulse, 4 pulses/m)
- | CAN or K-Line diagnostic interface
- | Info interface