



Covers directive
(EU) 1266/2009 with effect
to 10/01/2012

www.dtaco.vdo.com

DTACO[®] 2.0

Digital Tachograph

The digital EC tachograph DTACO[®] 2.0 EU convince by technology, handling, and reliability. It allows digital recording of data, such as driving and rest times, speed and rpm, as well as information needed for calibration.

The DTACO[®] 2.0 fits into a standard 1-DIN radio slot and consists of a recording unit with mass memory, two fully automatic smart card readers, an integrated printer and display to share information.

In conjunction with the intelligent KITAS2+ 2171 speed sensor and tachograph cards, the DTACO[®] 2.0 meets all the requirements of Regulation (EC) No. 1360/2002. The system calibration is only allowed to be performed from authorized service partners.

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 DTACO[®] 2.0 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. The digital recorded data can be simple evaluated and archived by, e.g. business management purposes, with VDO offering appropriate solutions such as the TIS-Web[®] Internet evaluation service.

As comfort function the DTACO[®] 2.0 offers the possibility to easy download and transfer wireless mass memory and driver card data via the Download Device (DLD[®]).

The DTACO[®] 2.0 covers all requirements according (EU) directive 1266/ 2009, with effect to 10/01/2012. Inter alia company friendly driving time calculation (1 Minute Rule) and standardised IMS-Signal (Independent Motion Signal) has been integrated. In addition the VDO Counter is integrated (optional), which shows drivers inside the DTACO[®] display the remaining driving and rest time.

VDO

DTCO® 2.0

Digital Tachograph

System components of the new digital tachograph (DTCO® 2.0)

The radio slot-sized DTCO® 2.0 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 KITAS2+ speed sensor and the requisite tachograph cards, the DTCO® 2.0 meets all the requirements of the new directive. The DTCO® 2.0 can also be optionally connected to an analogue speed indicator or an instrument cluster.

Data recording

The DTCO® 2.0 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® 2.0 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® 2.0 using their workshop card.

An overview of the essential new functions of the DTCO® 2.0

- VDO Counter, which keeps the driver constantly up to date about driving and rest time (like a personal assistant) The Counter function can be activated optional via software update.
- Company friendly driving time calculation based on second basis interpretation (1 Minute Rule)
- Remote Download
- Simplified user guidance (manual entry)
- Driver card download without company card possible
- Graphical printouts about speed diagrams and profiles in addition status and activity protocols.
- Allows single entry of vehicle identification number with Company Card after first calibration.
- Early warnings for upcoming periodical inspections and for expiry date of tachograph cards

Operation and functions

- Automatic driver warning after 4 hours and 15 minutes
- Printouts of all vehicle and driver data
- Recording of additional data (e.g. 168 hours speed data recording, odometer reading when vehicle stops)
- Early warnings (advance warnings about periodical inspections and expiry of tachograph cards)
- Fast Download
- Smooth dimming function for display illumination and button lighting
- Simple paper replacement – no tiresome feeding in
- Clear and concise user guidance with menu text
- Download status shown on display
- 29 AETR languages adjust „automatic“ and can be manually overwritten
- Display backlighting available in 9 colors

Interfaces

- 2 CAN interface for onboard electronics and Download Device (DLD®) (optional)
- Interface for intelligent sensor (KITAS2+)
- Via CAN-Bus the DTCO® 2.0 receives a standardised IMS-Signal (Independent Motion Signal) from vehicle. At vehicles without CAN the DTCO® 2.0 communicates with the DTCO® GeoLoc (external GPS-Box)
- Signal output (2 x v pulse, 1 x 4 pulses/m)
- Diagnostics interface CAN or K-Line
- Independent ignition info interface for onboard computers or other telematics systems
- 6-pin interface for programming, calibration and data download via Downloadkey
- 6-pin interface for data transfer by wireless (optional)

Technical data

- Installation dimensions: 178 x 50 x 150 mm (w x h x d), 1-DIN radio compartment format
- Operating voltage: 24 V (optional 12 V)
- Measuring range: 0 to 255 km/h
- Operating temperature: -25 °C to +70 °C
- Storage temperature: -40 °C to +85 °C
- Pulse range: 4,000 to 25,000 pulses/km
- Real-time clock based on UTC time
- Inputs: KITAS2+ 2171, n-sensor, additional inputs
- Outputs: 2 x v pulse, 1 x 4 pulses/m
- Accuracy: Speed: ±1 km/h, distance: ±1%, time: ±2 s/day
- Weight approx. 1,350 g

Suitable solutions for direct data download

- DLKPro Download Key
- Download Device (optional)
(DLD® Short Range and DLD® Wide Range)