Driver State Monitor

TS-DS02

Product Introduction

TS-DS02 is a driver state intelligent early warning terminal, which based on image recognition technology and inbuilt image intelligent processing core algorithm independently developed by our company. On one hand, with special camera, the TS-DS02 can warn the driver once he/she have bad driver behaviors like fatigue, distraction, calling, yawning, smoking and so on. It can also identify the driver ID. On the other hand, it can send data to monitor platform through GPRS/3G/4G device with serial port. It is suitable to safety management for private car, commercial vehicle, bus, dangerous cargo transport vehicle and so on.

Functions

- ☑ Fatigue warning
- ⬢ Distraction warning
- ⬢ Smoking warning
- ⬢ Calling warning
- ☑ Drier ID recognition
- ⬢ Power on self test
- ⬢ Driver abnormal warning

Features

- All-in-one design, small size, easy to install
- High image recognition accuracy for all skin color populations
- Work day and night, any weather conditions

- ☑ Independent core algorithm
- ☑ Vehicle voltage DC9-36V
- ☑ High fidelity TTS voice reminder

Product physical characteristics

Items	Specification	Remarks
Waterproof	IP54	
Weight	234g	
Dimension	85mm*61mm*34mm	
Shell material	Aluminum base+ABS+PC	
Install way	Bracket fixing install	

Power parameters

Item	Requirements	Remarks
Working voltage	9-36V	
Working current	≤450mA@12V	

Main body parameters

Items	Requirements	Remarks
Camera resolution	640*480	Default
Working distance	50-100cm	
Working conditions	Day&night (24 hours)	
Face detect	All face types, including wearing glasses (sunglasses, myopia)	
Detect scope	Face, eye, head, gesture	
Fatigue accuracy	Naked eye: 92%(wear glasses:90%), last over 2 seconds	
Distraction accuracy	95%, last over 3 seconds	
Inbuilt speaker	4Ω/3W	Inbuilt speaker

Environment features

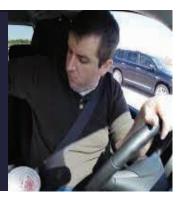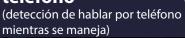| Suitable environment	Parameters	Remarks
Working temperature	-30℃ ~ +70℃	
Storage temperature	-40℃ ~ +85℃	
Relative humidity	5% ~ 95% （No frost）	

Product Features

Alerta de Cansancio
(detección de sintomas de cansancio, bostesos frecuentes mientras se maneja)

Advertencia de Distracción
(detección cuando el chofer se desconcentra de la vía mientras el vehículo está en movimiento)

Advertencia de No hablar por teléfono
(detección de hablar por teléfono mientras se maneja)

Advertencia de No Fumar
(detección de fumar dentro de la cabina)

Alerta de Fatiga
(detección de sintomas de fatiga, ojos cerrados mientras se maneja)

Advertencia de No Chatear
(detección de chateo o texting mientras maneja)

DRIVER STATE MONITOR
+
FLEET MANAGEMENT

VTs Solutions Inc.
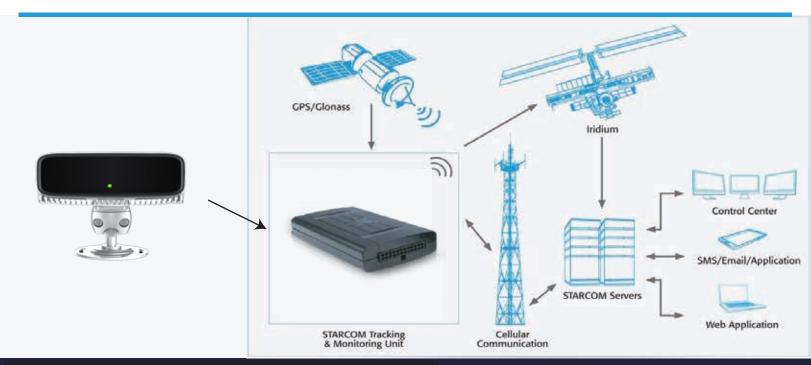
Arquitectura del Producto

GPS/Glonass

Iridium

STARCOM Tracking & Monitoring Unit

Cellular Communication

STARCOM Servers

Control Center

SMS/Email/Application

Web Application

ODBC support: The software uses ODBC connections, and therefore you can connect to any database platform.

Customers: contains all the information about the VH and Driver, including entity, Location, Model, etc.

Emergency Services: Contains information about the emergency services for each zone, for calls to bodies of private or public security.

Stations of installation: Contains information about the authorized installation stations and their authorized employees.

Operators: Contains the list of operators registered in the system, including permissions to access the software for each of them.

Displays the units: in a map with the monitoring system of the unit, presenting to the nearest emergency body that can provide assistance and relevant information.

Keeps a record of all actions, dates and users.

Customizable chain of events in case of an emergency

Monitoring Center

Beyond the functionality of a GPS, HELIOS Advanced allows a sophisticated and efficient control of your fleet land.

FLEET MANAGEMENT

Events Programing,
Speed Control,
Control of the KM,
Curves Detection,
Engine Running,
Notices Perimeters,
Measurement of the Fuel,
Monitoring Values,
Driver Identification,
Automated Tracking,
Transmission of KM.

PROTECTION OF THE VEHICLE AND DRIVER

Emergency button,
Detection of Abrupt Braking,
Detection of an Accident,
Auto Lock,
Lock / Unlock Doors.

COMMUNICATION

Cellular connectivity
TCP connectivity
Data Encryption
Navigation Support
Support of third party devices,
Data Encryption,
Anti-jammer
Compact Protocol

LOCATION

Tracking and tracing in real time,
GPS Mileage,
Last storage location,
Operation of events log in an independent way,
Events log,
Backup Server,
Data in private cloud.

ALARM SYSTEM

Theft detection system,
Programming times,
Wakeup from accelerometer:
Towing Detection:,
4 Disarming Devices:,
Gradual detention of the vehicle through the pulses sent to the fuel pump

EVENTS PROGRAMMING

Control of Inputs / Outputs using geofencing programming.
Programming of variables:
- Temperature
- Speed
- Perimeter
- Location

AIR COMMANDS

Assemble / Disassemble,
Remote On / Off Remote,
Disconnection of Fuel Pump,
Remote Opening / Closing of doors,
Integration with applications of Roadside Assistance,
Communication of Voice and Data,
Vehicle Tracking,
Vehicle Status,
Parameters Programming.

CONTROL TOWER

Monitoring of Fleet,
Monitoring of Compliance,
Monitoring of Inputs / Outputs,
Monitoring of Programming Events,
Recording of Time Delivery,
Remote Assistance,
Attention to the Emergency calls,
Fuel Pump Lock in case of theft,
Integration with Emergency Services,
Integration with BI.

HELIOS ADVANCED

> Real-time solutions for fleet management, protection against theft, security systems and driver state monitor

Autonomous units

Quick and easy installation

Events configuration

Audit log

Geofencing

Accelerometer

Information in memory

Roles and Authorizations for users

System based on the web

Multiple languages.

STARCOM Systems

Starcom Systems is a leading global company, specializing in advanced automated real-time systems for emote tracking and management of vehicles, containers, assets and people. All systems are characterized in strength, stability and continuous performance.

Starcom Systems is publically traded on the AIM Market of the London Stock Exchange, conforming to the highest and most strict regulations in the market, proving its stability and reliability.

Starcom's systems provide a complete solution, consisting of innovative equipment and unique software. Thanks to the user-friendliness of the system, it provides useful and effective solutions, based on each user's settings and requirements.

With more than 15 years of experience and expertise, Starcom Systems distributes and sells its products through 110 technology partners and independent operators in more than 53 countries, and its application operates in 32 languages. As a global company, Starcom Systems' products include certifications from all the leading standards in the world, including E 24 certification, Safety certification, EMC test certification, Tuv-Rheinland certification and more.

Certificate ISO 9002

Products tested in the field with global certification
(TUV, FCC, E-24, and EMC)

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VTs x3

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