

Offboard Diagnostic System ODS

Mobile Diagnostics for Towed Vehicles

- Tire Pressure Monitoring System (TPMS)
- Comprehensive Lighting Test
- CAN Bus Reading
- Digital Test Report
- Pin Assignment Test
- Mobile Use



IGEMA Offboard Diagnostic System ODS

Mobile Vehicle Diagnostics and Trailer Testing

Efficiency and safety through smart vehicle diagnostics

Based on many years of collaboration with the market leader in commercial vehicle systems, IGEMA has developed a range of intelligent diagnostic and testing systems that enable the operational and driving readiness as well as the functional safety of vehicles to be checked.

The IGEMA Offboard Diagnostic System ODS has been developed as an intelligent, compact and mobile test and diagnostic system for towed vehicles (trailers, towed machinery).

Tire Pressure Monitoring System (TPMS)

- Overview of all relevant measurements according to ECE R141: tire pressure, tire temperature, and sensor battery status
- Early warning in case of critical values or system errors – for greater safety and reduced risk of downtime

Comprehensive Lighting Test

- Display of performance values, lamp types, and error status
- Choice between manual control of individual lights or fully automated test sequence
- Includes indicator test with side marker light check

CAN Bus Diagnostics, according to ISO 11992

- Reading EBS data (EBS22 to EBS25) for analysis of electronic braking systems

Digitale Test Report

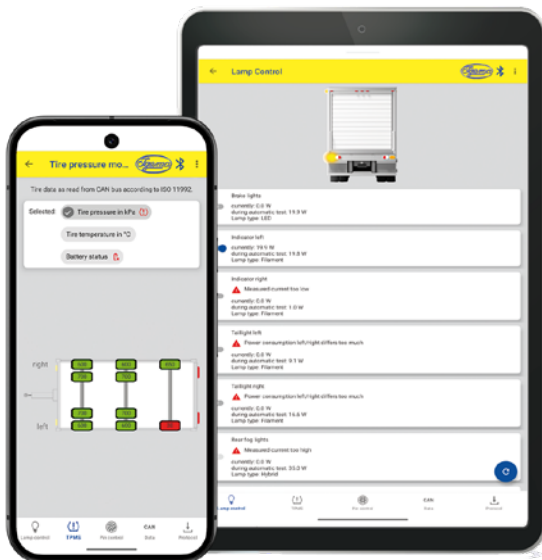
- Standard-compliant test report in PDF format
- Option for customized documentation
- Photo documentation for complete traceability

Pin-Test

- Individual function check via ISO 12098 socket with 6 freely configurable pins

Independent power supply & flexible use

- Works with 12 V or 24 V onboard voltage
- Compact design in a robust outdoor case
- All connectors and the main switch are easily accessible on the outside



TPMS



Light-Test

CAN

Data



Protocoll



Pin-Test

> App-Controlled Offboard Diagnostic System

The IGEMA system is operated via a smartphone or tablet using an app over Bluetooth. The app enables intuitive operation, complete data collection, and test execution.

All test scenarios can be started individually via their respective icons or collectively in an automated test sequence.

Results are displayed directly on the mobile device, logged as a PDF, and can be supplemented with photos.

ODS Equipment

Hard-shell case (IP65) with accessories



1. Li-Ion quality/replacement battery 3.0 Ah, 2 pcs
2. Sockets according to ISO 7638/12V, ISO 11446/12V
3. Compartment recess: 341 x 48 x 105 mm (W x D x H)
4. Power switch; USB charging socket for tablet/smartphone
5. Pressure equalization valve

6. Compartment recess for tablet: 260 x 20 x 105 mm (W x D x H)
7. Sockets according to ISO 7638/24V, ISO 12098/24V
8. Li-Ion premium replacement battery 5.0 Ah, 2 pcs
9. Premium DUO charger
10. Tablet with pre-installed app

Equipment Components

Basic Equipment Components

- Hard-shell case (IP54)
- IGEMA ODS app

Technical Special Equipment / Optional Accessories

- Hard-shell case (IP65)
- Li-Ion replacement batteries:
quality battery 3.0 Ah, 2 pcs
premium battery 5.0 Ah, 2 pcs

Dimensions & Weight:

- Dimensions: 510 x 380 x 165 mm (W x D x H)
- Weight (basic equipment): approx. 6 kg
(without batteries)

- Android tablet with pre-installed IGEMA ODS app
- USB charging socket for tablet/smartphone
- Single and/or DUO charger
- Service contract with annual update subscription

> Recommendation for Outdoor Use

For several hours of outdoor operation without charging options, we recommend:

- + outdoor hard-shell case (IP65)
- + powerful Li-Ion premium battery set
- + additional replacement battery set

This ensures you are fully equipped for mobile applications!

ODS - Areas of Application

Safety begins with intelligent testing solutions from IGEMA

This **comfortable, mobile diagnostic tool** is particularly well-suited for companies and organizations that need to check and ensure the **operational and driving readiness** as well as **functional safety of trailers and towed vehicles** – both for **use in the workshop and outdoors**.



Workshops

Testing and documenting functions after maintenance or repair.



Manufacturer

End-of-Line-tests and inspections following reclamations.



Rental Companies & Leasing Providers

Condition documentation upon handover and return.



Inspection Organizations & Technical Services

Legally required main inspections and safety checks of all systems.



BALM, Police
Bundeswehr & THW

Checking road safety and operational readiness of trailers and machinery – during ongoing operations as well as before and after deployments.

More Products

Series „Systems for Vehicle Safety“



BTU



Pressure Booster



TTI



HU-Adapter GEN II/
SP-Adapter



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