HU-Adapter GEN II
SP-Adapter
TTI - Truck Trailer Interface

Test Systems for Vehicle Safety

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IGEMA HU-Adapter GEN II, SP-Adapter

Mobile Vehicle Diagnostics and Trailer Testing

The **HU-Adapter GEN II** is a universally applicable test tool for the General Vehicle Inspection in accordance with § 29 StVZO (Road Traffic Licensing Regulations, Germany). It enables communication with the vehicle electronics via the OBD-socket and supports experts in testing various safety functions. This includes brake efficiency testing as well as dynamic axle damping tests and battery tests for electric or hybrid vehicles.

The **SP-Adapter** is used to carry out the legally required safety inspection of commercial vehicles, during which the safety-relevant electronically controlled systems are checked via the OBD-socket.

Technical Details:

- Robust IP54 plastic housing with impact protection and sealing plugs
- Operation via durable membrane keypad and display through ePaper screen and color LEDs
- OBD connector additionally equipped with integrated LEDs for illumination at the vehicle
- 3D sensors for acceleration, rotation rates, and magnetic field
- Interfaces: WLAN, Bluetooth, and USB-C
- Vehicle interfaces: CAN, CAN-FD, K-line, L-line, DoIP
- Compatible with vehicles of all drive types (combustion engine, electric, hybrid)
- Preconfigured for the main inspection or safety check

HU-Adapter GEN II / SP-Adapter

> NOTICE for HU-Adapter GEN II, SP-Adapter and TTI:

The HU Adapter GEN II / SP Adapter may only be purchased by technical inspection agencies, monitoring organizations, in-house inspectors, and certified SP workshops that are authorized to carry out general inspections (HU, Germany) or safety inspections (SP).

IGEMA Truck Trailer Interface TTI

Mobile Vehicle Diagnostics and Trailer Testing

The legislator requires an interface check for commercial vehicles as well as vehicles of class O3/O4 (trailers and towed machinery) as part of the periodic technical inspection (HU) and safety inspection (SP). Since heavy commercial vehicle trailers do not have an OBD interface, the Truck Trailer Interface (TTI) was developed.

The **TTI** enables interface testing of tractor-trailer combinations using the HU adapter, based on the specifications of the FSD central office according to the German Road Traffic Act (StVG). For this purpose, the TTI provides an OBD interface for the HU/SP adapter and converts the CAN specifications between ISO 11992 and ISO 11898.

Additional functions include switching the power supply of the trailer control unit on and off, controlling the trailer ABS indicator light in the towing vehicle, and displaying the status of the trailer ABS indicator light.

A PC with the corresponding software (FSD.HU21) is required for operation and display.

Technical Details:

- Robust design for outdoor use (impact-resistant plastic housing and protection class according to IP46)
- Operating mode switching via HU/SP application for directly using the button on the TTI
- Separate indicator LED for ABS warning light
- Ergonomic operation thanks to LEDs and buttons on both sides
- Power supply of 24 VDC via ISO connector from the truck-trailer interface

TTI - Truck Trailer Interface

Accessories:

TTI Extension Cable – cable between towing vehicle (HU-/SP adapter) and trailer (TTI)

TTI Extension Cable

7-pole connector

Test Systems - Areas of Application

Safety begins with intelligent testing solutions from IGEMA

The safe functioning of braking systems, vehicle stability, and suspension is our top priority in the development and production of our on-board and off-board diagnostic systems.

For many years, we have been a reliable system partner for major international manufacturers of safety equipment in the commercial vehicle sector. Before IGEMA diagnostic and testing systems are deployed by, for example, vehicle manufacturers and their authorized workshops, they undergo real-world testing in the laboratory, on test vehicles, and on the proving ground.

	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 Organi-zations & Technical Services	Legally required main inspections and safety checks of all systems.
	BALM, Police Bundeswehr & THW	Checking road safety and operational rea-diness 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

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