



Brake test system BTU

for trailers with pneumatic braking system



Reliability is our strength

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Application

The IGEMA brake test system BTU (Brake Test Unit) was developed for the brake test of trailers with pneumatic brake system. The BTU is used by technical experts, inspectors and manufacturers for **the assessment of vehicle brakes during dynamic driving tests**.

The basis and technical standard for the dynamic brake test are the currently valid guidelines and regulations. In particular, **the ECE Regulation No. 13 for vehicles of category O (trailer) with compressed air brake systems**, or vehicles of the categories R and S with reference to the DELEGATED REGULATION (EU) 2015 / 68.

In accordance with the above-mentioned guidelines and regulations the BTU allows a sole control of the service brake system in the pulled vehicle. The mean brake deceleration in the range of 80% to 10% of the reference speed is determined in consideration of the moved vehicle mass.

- > The BTU allows to reproduce every measurement, as intelligent control electronics ensure optimum control behavior for the trailer's braking system, even during pressure fluctuations within the pressure supply.
- > Compared to alternative methods, manual readjustment of the pressure via the pressure reducer on the trailer is no longer necessary.

Features

- ✓ Fast installation, easy operation
- ✓ High reproducibility of the measurement
- ✓ Robust and resistant to extreme weather conditions



Brake test BTU operation

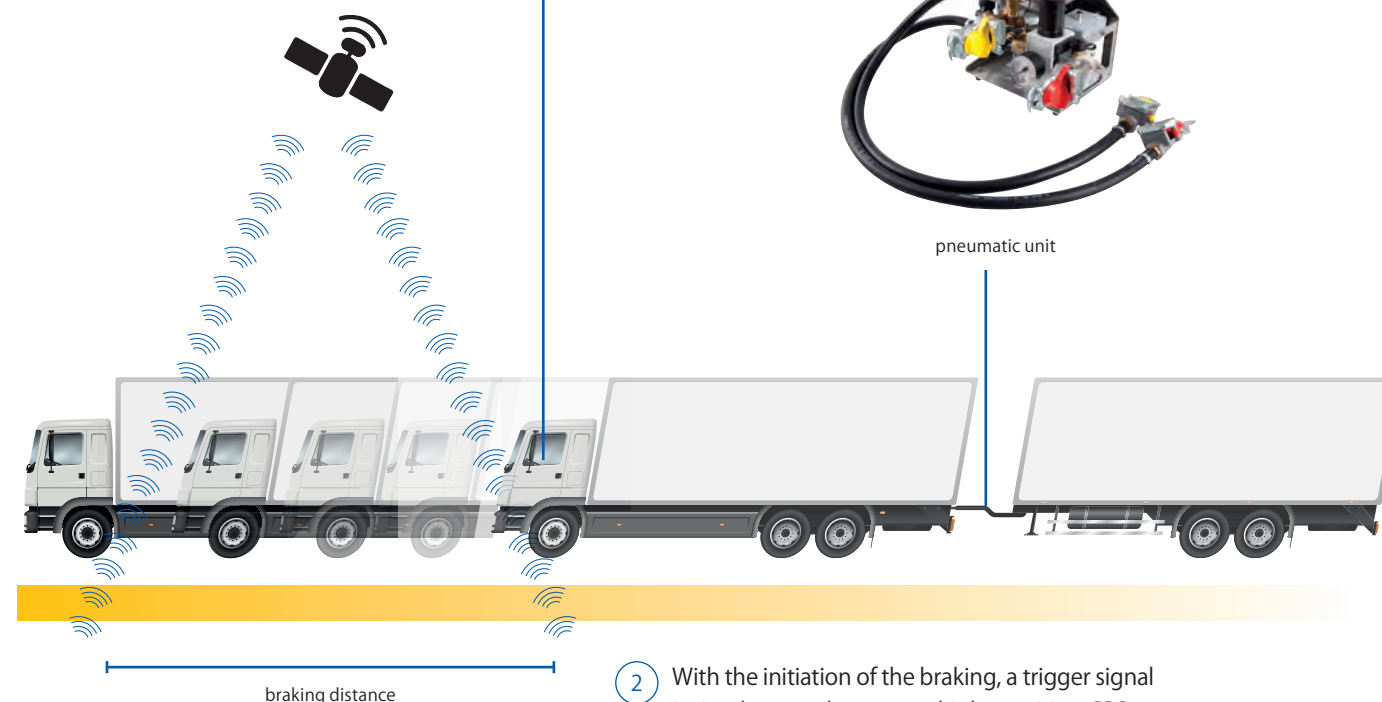
- 1 The **control unit / handheld** can set a **brake pressure between 0 and 800 kPa in steps of 10 kPa** from the driver's cab, which is selectively directed into the brake system of the trailer via the BTU's pneumatic unit. The precise control electronics of the BTU always keep a constant pressure in the brake system at the preset target pressure-level - independent of the brake pressure of the towing vehicle, which is released during the brake test. The vehicle is slowed down only by the brake line of the trailer.



control unit / handheld



pneumatic unit



- 2 With the initiation of the braking, a trigger signal is simultaneously sent to a high-precision GPS measuring unit "Sensorbox", which records the braking distance and stores it in a data memory



BTU-Package

Brake test system BTU



CE

Pneumatic unit

The appliance is connected to the control unit via a connecting cable with a round plug connector. From there it is supplied with operating voltage (12-24 V). Via the connecting cable, it also receives the data for setting the selected control parameters.

The voltage rating of 12-24 V applies to the overall system. The connection for the supply voltage is located at the control unit / handheld.

High-precision GPS sensor box (optional)



Control unit / handheld with protective case including accessories

- > Control unit / handheld
The display shows the corresponding function of the keys as well as the target and actual value of the control pressure in the brake system. The control unit / handheld is designed for an operating voltage of 12-24 V and is supplied with a DIN 9680 connector.
- > Connecting cable to the pneumatic unit (5 m)
Other cable lengths available on request.
- > Power supply cable (2 m)
- > External start / stop button with cable (1.5 m)
- > Adapter cable with standard vehicle plug (0.2 m)
- > HP-GPS sensor box connection cable (1.5 m)
(system-specific)

The IGEMA brake test system has a technical certificate from TÜV-Nord and a CE declaration of conformity.

