



HS-GL-20 Helicopter Weighing System

Designed to measure the center of gravity in helicopters during maintenance procedures

The ALTHEN company has developed a measuring system for determining the centre of gravity during maintenance work in the field of helicopter maintenance. This measuring system is a mobile device, consisting of a measuring and transport case, with which the centre of gravity and the total weight of a helicopter can be measured. In addition, there is the optional possibility of a 2-axial inclination measurement. The yellow case with the measuring system contains a 10-channel data logger, 3 strain gauge measuring amplifiers, summation formation as well as the power supply for 100 ... 230V/50...60Hz.

The second case contains the force transducers, the connection cables and possibly the helicopter-specific adapters*. To carry out the measurement, the helicopter is lifted over the force transducers by means of a lifting device. The adapters establish the connection to the lifting points on the helicopter and the force transducers. This ensures that the helicopter is lifted at the designated lifting points and that the flight pattern is not damaged. During the measurement, the operator has the possibility to read the measured values of the individual transducers as well as the total weight and the inclination of the helicopter. For this purpose, he has the choice between decimal numerical values or the representation of the temporal course in the form of a curve. The measured values can either be stored in the data logger or saved and archived on a USB stick.

The GL240 data logger used in this measuring system can be removed from the case and is thus available for further external measurements. It offers the possibility to record voltages, temperatures and humidity. The measuring system can be easily adapted to different flight patterns by exchanging the force transducers and adapters.

* The adapters required for specific helicopters are not included in the scope of delivery.





■ FEATURES

- Mobile measuring case (470x365x190mm) with data logger
- 3-channel force measurement with summation as well as 2-axial inclination measurement (optional)
- Enables weight and centre of gravity measurement
- Low profile force transducer type ALF318 (linearity deviation max. 0.1%)
- Measuring range nominal force 20 kN per transducer (other measuring ranges on request)
- Measuring range inclination optional on request
- Connection cable for force transducer and optional inclination sensor
- Data logger, 10-channel with colour LCD display
- Data logger removable for external measurements
- Power supply 100 ... 240 VAC / 50 ... 60 Hz
- Incl. additional transport case for accessories (420x325x180mm)

■ PRODUCT SPECIFICATIONS

Power supply	100 ... 240 VAC / 50 ... 60 Hz
Data logger	GL240 from Graphtec (10 channel)
Amplifier	3 strain gauge measuring amplifiers
Inclination measurement (optional)	2-axial
Force transducer	Type ALF318, nominal force 20 kN, linearity 0.1%
Dimensions of the measuring case	470x365x190mm