

Display device (rail-mounted module) KERN CE Hx

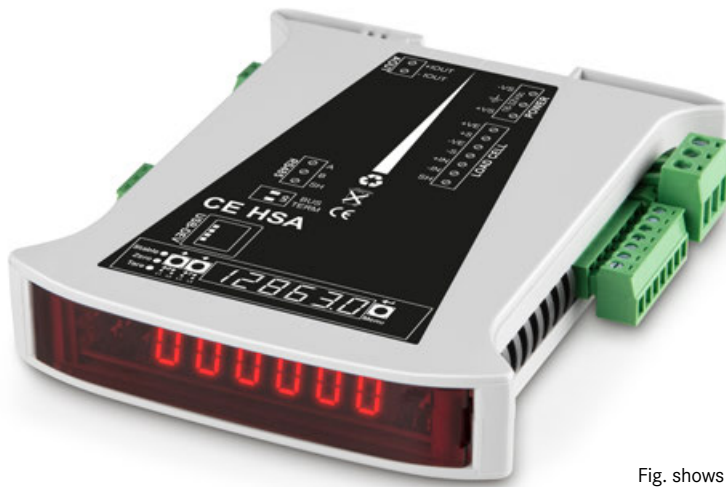


Fig. shows KERN CE HSA



Super compact display device (rail-mounted module) for installation in switch cabinets

Features

- Compact display unit for recording weighing data using strain gauge load cells, e.g. in industrial applications
- Due to its small size, it is particularly space-saving to install in switch cabinets
- Thanks to the many interface variants, the modules can be ideally integrated into existing infrastructures and systems
- The modules can be used either individually or as a Buslink system with a total of up to 332 DIN rail modules

- The configuration of the module can be carried out conveniently via a connected PC with the suitable software (Download see Internet)
- Bright LED display for optical control and settings
- Time-saving G-Cal™ (Geographic Calibration) technology for fast and accurate calibration without weights conveniently over a network or the Internet worldwide
- Convenient communication via remote devices
- Backup and restore function via USB port
- Can handle various industrial protocols such as Ethernet IP, Modbus TCP, Modbus RTU, FINS and Profibus DP

- Extremely high measurement frequency possible, up to 1600 data records/s
- Internal resolution 24 Bit

Technical Data

- LCD display, digit height 7,6 mm
- Dimensions W×D×H 101×120×22,5 mm
- Permissible ambient temperature -10 °C/40°C

Accessories

- Mains adapter for power supply of the KERN CE HS, mountable on DIN rail, KERN CE HSS

Features	Model KERN				
	CE HSA	CE HSE	CE HSN	CE HSP	CE HSR
Power supply	18-32 Vdc; 4 W max.	18-32 Vdc; 4 W max.	18-32 Vdc; 4 W max.	18-32 Vdc; 4 W max.	18-32 Vdc; 4 W max.
Load cell power supply	5 Vdc	5 Vdc	5 Vdc	5 Vdc	5 Vdc
Sensitivity	0,1 µV/d	0,1 µV/d	0,1 µV/d	0,1 µV/d	0,1 µV/d
Adjustable nominal sensitivity	1; 1.5; 2; 2.5; 3 mV/V	1; 1.5; 2; 2.5; 3 mV/V	1; 1.5; 2; 2.5; 3 mV/V	1; 1.5; 2; 2.5; 3 mV/V	1; 1.5; 2; 2.5; 3 mV/V
Input voltage Unipolar @3mV/V	-1 mV to +16 mV	-1 mV to +16 mV	-1 mV to +16 mV	-1 mV to +16 mV	-1 mV to +16 mV
Input voltage Bipolar @3mV/V	-16 mV to +16 mV	-16 mV to +16 mV	-16 mV to +16 mV	-16 mV to +16 mV	-16 mV to +16 mV
A/D Conversion speed	1600/s	1600/s	1600/s	1600/s	1600/s
Max. load cell impedance	1200Ω	1200Ω	1200Ω	1200Ω	1200Ω
Min. load cell impedance	43,75 Ω	43,75 Ω	43,75 Ω	43,75 Ω	43,75 Ω
Max. no. of load cells 350 Ω	8	8	8	8	8
Max. no. of load cells 1000 Ω	22	22	22	22	22
Max. number of d	10.000	10.000	10.000	10.000	10.000
Display steps	1,2,5,10,20,50,100,200	1,2,5,10,20,50,100,200	1,2,5,10,20,50,100,200	1,2,5,10,20,50,100,200	1,2,5,10,20,50,100,200
Communication/Interfaces	USB	USB, Ethernet	USB, PROFINET	USB, PROFIBUS	USB, RS-232/-422
Analog output	0/4-20/24mA	-	-	-	-
Dimensions W×D×H	120×110×22 mm	120×110×22 mm	120×110×22 mm	120×110×22 mm	120×110×22 mm
Net weight g	150	150	150	150	150

Models also available with verification approval, please enquire

Pictograms

Internal adjusting: Quick setting up of the balance's accuracy with internal adjusting weight (motordriven)	KERN Communication Protocol (KCP): It is a standardized interface command set for KERN balances and other instruments, which allows retrieving and controlling all relevant parameters and functions of the device. KERN devices featuring KCP are thus easily integrated with computers, industrial controllers and other digital systems	Suspended weighing: Load support with hook on the underside of the balance
Adjusting program CAL: For quick setting up of the balance's accuracy. External adjusting weight required	GLP/ISO log: The balance displays serial number, user ID, weight, date and time, regardless of a printer connection	Battery operation: Ready for battery operation. The battery type is specified for each device
Easy Touch: Suitable for the connection, data transmission and control through PC or tablet.	GLP/ISO log: With weight, date and time. Only with KERN printers.	Rechargeable battery pack: Rechargeable set
Memory: Balance memory capacity, e.g. for article data, weighing data, tare weights, PLU etc.	Piece counting: Reference quantities selectable. Display can be switched from piece to weight	Universal plug-in power supply: with universal input and optional input socket adapters for A) EU, CH, GB; B) EU, CH, GB, USA; C) EU, CH, GB, USA, AUS
Alibi memory: Secure, electronic archiving of weighing results, complying with the 2014/31/EU standard.	Recipe level A: The weights of the recipe ingredients can be added together and the total weight of the recipe can be printed out	Plug-in power supply: 230V/50Hz in standard version for EU, CH. On request GB, USA or AUS version available
Data interface RS-232: To connect the balance to a printer, PC or network	Recipe level B: Internal memory for complete recipes with name and target value of the recipe ingredients. User guidance through display	Integrated power supply unit: Integrated in balance. 230V/50Hz standard EU. More standards e.g. GB, USA or AUS on request
RS-485 data interface: To connect the balance to a printer, PC or other peripherals. Suitable for datatransfer over large distances. Network in bus topology is possible	Totalising level A: The weights of similar items can be added together and the total can be printed out	Weighing principle: Strain gauges: Electrical resistor on an elastic deforming body
USB data interface: To connect the balance to a printer, PC or other peripherals	Percentage determination: Determining the deviation in % from the target value (100 %)	Weighing principle: Tuning fork: A resonating body is electromagnetically excited, causing it to oscillate
Bluetooth* data interface: To transfer data from the balance to a printer, PC or other peripherals	Weighing units: Can be switched to e.g. nonmetric units. See balance model. Please refer to KERN's website for more details	Weighing principle: Electromagnetic force compensation: Coil inside a permanent magnet. For the most accurate weighings
WiFi data interface: To transfer data from the balance to a printer, PC or other peripherals	Weighing with tolerance range: (Checkweighing) Upper and lower limiting can be programmed individually, e.g. for sorting and dosing. The process is supported by an audible or visual signal, see the relevant model	Weighing principle: Single cell technology: Advanced version of the force compensation principle with the highest level of precision
Control outputs (optocoupler, digital I/O): To connect relays, signal lamps, valves, etc.	Hold function: (Animal weighing program) When the weighing conditions are unstable, a stable weight is calculated as an average value	Verification possible: The time required for verification is specified in the pictogram
Analogue interface: to connect a suitable peripheral device for analogue processing of the measurements	Protection against dust and water splashes IPxx: The type of protection is shown in the pictogram.	DAKkS calibration possible (DKD): The time required for DAKkS calibration is shown in days in the pictogram
Interface for second balance: For direct connection of a second balance		Factory calibration (ISO): The time required for Factory calibration is shown in days in the pictogram
Network interface: For connecting the scale to an Ethernet network		Package shipment: The time required for internal shipping preparations is shown in days in the pictogram
		Pallet shipment: The time required for internal shipping preparations is shown in days in the pictogram

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KERN – Precision is our business

To ensure the high precision of your balance KERN offers you the the appropriate test weight in the international OIML error limit classes E1-M3 from 1 mg - 2500 kg. In combination with a DAKkS calibration certificate the best pre-requisite for proper balance calibration.

The KERN DAKkS calibration laboratory today is one of the most modern and best-equipped DAKkS calibration laboratories for balances, test weights and force-measurement in Europe.

Thanks to the high level of automation, we can carry out DAKkS calibration of balances, test weights and force-measuring devices 24 hours a day, 7 days a week.

Range of services:

- DAKkS calibration of balances with a maximum load of up to 50 t
- DAKkS calibration of weights in the range of 1 mg - 2500 kg
- Volume determination and measuring of magnetic susceptibility (magnetic characteristics) for test weights
- Database supported management of checking equipment and reminder service
- Calibration of force-measuring devices
- DAKkS calibration certificates in the following languages DE, EN, FR, IT, ES, NL, PL
- Conformity evaluation and reverification of balances and test weights

Your KERN specialist dealer: