PRODUCT DATA

HBK 2255
Sound Level Meter

An advanced, easy-to-use class 1 sound level meter

Whether measuring environmental noise from a new motorway, determining the sound power of a new product, or testing sound insulation between apartments, today's acoustic professionals need a sound level meter that is powerful and flexible, but also efficient, reliable and easy-to-use. That is what HBK 2255 delivers.

This robust, class 1 sound level meter puts advanced functionality, ease-of-use and versatility into the palm of your hand together with the reliability and confidence that is ensured with the HBK brand.

HBK 2255 works seamlessly with a range of apps, each providing a complete solution for a specific job-to-do. Accurate acoustic measurement, analysis and documentation has never been so simple.



Uses and features

Uses

- Noise measurements requiring IEC 61672-compliant instrumentation
- Basic broadband noise measurements with Noise Partner
- Environmental noise assessments with Enviro Noise Partner
- Occupational noise assessments with Work Noise Partner
- Free-field sound power determination according to ISO 3744 or ISO 3746 and toy noise measurements according to EN 71-1with Product Noise Partner
- Sound insulation tests according to national and international standards with Building Acoustics Partner
- Integrate type-approved sound level measurement data into other systems with Open Interface BZ-7400

Features

- Single measurement range: 22.7* – 140.6 dB(A) from noise floor to maximum level
- 16 GB internal storage
- Automatic measurement transfer to network or USB storage media for backup and analysis
- Robust design for indoor and outdoor measurements (IP 54)
- Wireless connectivity for remote control of measurements and data transfers
- Simplified user interface using either the sound level meter or your iOS mobile device
- GPS for time and position
- Calibrator auto-detection
- Windscreen auto-detection and compensation
- TEDS support
- Removable preamplifier
- Lightweight
- Weather station support
- Open programming interface
- Analysis-quality audio recordings (with the optional BZ-7451 licence)

* 15.8 dB(A) is the typical noise floor for Microphone Type 4966

A complete solution

HBK 2255 Sound Level Meter is a complete package solution that includes the Noise Partner app for both mobile measurement control, display and data transfer and as a PC-based application for analysis and documentation.

Fig. 1 *The complete solution: HBK 2255 Sound Level Meter and the Noise Partner app installed on a mobile device and PC*



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The sound level meter

HBK 2255 provides effortless usability with a dust- and water-resistant body that is rubberized for a more secure grip and ensured compliance to IP 54. The seven control buttons can be comfortably operated with one hand, and the clear, bright display shows you the most important information at a single glance. With a 13-hour battery life, you can be sure it will not let you down.

Fig. 2 *The sound level meter's lightweight design and user-friendly display*



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Wireless connectivity

Using the Noise Partner app on your mobile device, you can wirelessly connect to HBK 2255, giving you the flexibility to control your measurements via your mobile device, thus avoiding possible body reflections or unsafe environments. Once the app has connected to the sound level meter, the app will remember the instrument and automatically connect to it when in range.

TEDS

TEDS (transducer electronic data sheet) support makes it easy to use HBK 2255 with multiple microphones. The sound level meter automatically detects the attached microphone and configures itself accordingly.

Smart accessories

From tripods, calibrators, mobile phone holders, and more – HBK provides you with the accessories you need to complete any measurement task using HBK 2255.

See "Ordering information" for a complete overview.

Hassle-free licencing

HBK 2255 licences are installed in the instrument, enabling measurement functions on the instrument as well as:

- Allowing connections to licenced mobile apps
- Embedding licences in measurement files for editing in licenced desktop apps

This means there are no licence files to install on the PC, and no dongles. Mobile and desktop apps can be freely downloaded and installed on any iOS mobile device and PC, and measurements made with the instrument can be easily and seamlessly edited by the desktop app on any PC without extra requirements.

A platform that helps you get the job done

The HBK 2255 platform includes a range of apps, each tailored to assist a specific job-to-do. An instrument can be licenced for more than one app, so switching tasks is as easy as – switching apps.

All available mobile apps can be downloaded from the App Store®. PC apps can be downloaded at www.bksv.com.

- **Enviro Noise Partner** – for environmental noise surveys that includes markers to isolate sounds (for example, removing a barking dog or identifying the moment when a sound source is operating) and checklists to ensure each step is completed to local requirements
- **Work Noise Partner** – for workplace noise surveys that guides you through a full work-day noise exposure calculation. Frequency analysis is included along with tools to select appropriate hearing protectors when needed
- **Product Noise Partner** – for free-field sound power determination according to ISO 3744 or ISO 3746, or toy noise assessments according to EN 71-1
- **Building Acoustics Partner** – for assessment of sound insulation according to national and international standards



Compliance with standards

NOTE: Below is only guaranteed using accessories listed in this document

	The CE marking is the manufacturer's declaration that the product meets the requirements of the applicable EU directives. For this product it is the Radio Equipment Directive 2014/53/EU. RCM mark indicates compliance with applicable ACMA technical standards – that is, for telecommunications, radio communications, EMC and EME. China RoHS mark indicates all items shipped to China have to be marked as to whether the items are compliant or non-compliant with the Chinese restriction of hazardous substances. WEEE mark indicates compliance with the EU WEEE Directive. FCC mark is a certification mark employed on electronic products manufactured or sold in the United States, which certifies that the electromagnetic interference from the device is under limits approved by the Federal Communications Commission
Electrical Safety	EN/IEC 61010-1, ANSI/UL 61010-1 and CSA C22.2 No.1010.1: Safety requirements for electrical equipment for measurement, control and laboratory use – Part 1: General requirements CB Scheme: • Battery: EN/IEC 62133-2:2017/A1:2021: Secondary cells and batteries containing alkaline or other non-acid electrolytes. Safety requirements for portable sealed secondary cells, and for batteries made from them, for use in portable applications – Part 2: Lithium systems
Radio Spectrum	ETSI EN 300 328 V2.1.1: Wideband transmission systems; Data transmission equipment operating in the 2.4 GHz ISM band and using wide band modulation techniques; Harmonised Standard covering the essential requirements of article 3.2 of Directive 2014/53/EU. EN 303 413 V1.1.1: Satellite Earth Stations and Systems (SES); Global Navigation Satellite System (GNSS) receivers; Radio equipment operating in the 1164 – 1300 MHz and 1559 – 1610 MHz frequency bands
EMC Emission and Immunity	EN/IEC 61326: Electrical equipment for measurement, control and laboratory use – EMC requirements. EN/IEC 61000-6-2: Generic standard – Immunity for industrial environments. EN/IEC 61000-6-3: Generic emission standard for residential, commercial and light industrial environments, class B. CISPR 32: Radio disturbance characteristics of multimedia equipment. Class B limits. EN 301 489-1 V2.2.0: Electromagnetic compatibility (EMC) standard for radio equipment and services; Part 1: Common technical requirements; Harmonised Standard covering the essential requirements of article 3.1(b) of Directive 2014/53/EU and the essential requirements of article 6 of Directive 2014/30/EU. EN 301 489-17 V3.2.0: Electromagnetic compatibility (EMC) standard for radio equipment and services; Part 17: Specific conditions for broadband data transmission systems; Harmonised Standard covering the essential requirements of article 3.1(b) of Directive 2014/53/EU. EN 301 489-19 V2.1.0: For radio equipment and services; Part 19: Specific conditions for Receive Only Mobile Earth Stations (ROMES) operating in the 1.5 GHz band providing data communications and GNSS Receivers Operating in the RNSS band (ROGNSS) providing positioning, navigation, and timing data. 47 CFR FCC Part 15, subpart B
Product-specific Standards (incl. EMC)	EN/IEC 61672-1:2013: Electroacoustics – Sound level meters – Part 1: Specifications EN/IEC 61260-1:2014: Electroacoustics – Octave-band and fractional-octave-band filters – Part 1: Specifications
Specific Absorption Rate (SAR)	RED (Europe): • 1999/519/EC: Council recommendation of 12 July 1999 on the limitation of exposure of the general public to electromagnetic fields (0 Hz – 300 GHz) • EN 62311: General radio frequency (RF) exposure standard that effectively refers to specific absorption rate (SAR) standards for devices where other assessment methods are not relevant • IEC 62209-2: Human exposure to radio frequency fields from hand-held and body-mounted wireless communication devices – Human models, instrumentation, and procedures – Part 2: Procedure to determine the specific absorption rate (SAR) for wireless communication devices used in close proximity to the human body (frequency range of 30 MHz to 6 GHz) FCC (US): • FCC CFR 2.1093: Radio frequency radiation exposure evaluation: Portable devices • KDB 447498 D01: General RF exposure guidance • KDB 865664 D01: SAR measurement 100 MHz – 6 GHz • KDB 248227 D01: SAR guidance for IEEE 802.11 (Wi-Fi) transmitters • IEEE standard 1528 IEEE: Recommended practice for determining the peak spatial-average Specific Absorption Rate (SAR) in the human head from wireless communications devices: measurement techniques ISED (Canada): • RSS-102: Radio frequency (RF) exposure compliance of radio communication apparatus
Temperature	IEC 60068-2-1 & IEC 60068-2-2: Environmental Testing. Cold and Dry Heat • Storage Temperature: –25 to +70 °C (–13 to +158 °F)
Humidity	IEC 60068-2-78: Damp Heat: 93% RH (non-condensing at +40 °C (104 °F)). Recovery time 2 – 4 hours
Mechanical	Non-operating: • EN/IEC 60068-2-6: Vibration: 0.15 mm, 20 m/s^2, 10 – 500 Hz • EN/IEC 60068-2-27: Bump: 4000 bumps at 400 m/s^2 • EN/IEC 60068-2-27: Shock: 1000 m/s^2, 5 directions • EN/IEC 60068-2-32: Free fall: 100 cm, 10 directions
Enclosure	EN/IEC 60529 (1989): Protection provided by enclosures: IP 54*

* With preamplifier or extension cable connected to the top socket

Microphone

SUPPORTED MICROPHONES	One of the following microphones, which consist of a microphone cartridge and a microphone preamplifier: • Type 4952: Outdoor microphone • Type 4966-Z-041: General purpose ½″ microphone for HBK 2255
CONNECTOR	7-pin LEMO 1B circular, push/pull
NOMINAL OPEN-CIRCUIT SENSITIVITY	Type 4966-Z-041: 50 mV/Pa (corresponding to −26 dB re 1 V/Pa) ±1.5 dB Type 4952: 31.6 mV/Pa (corresponding to −30 dB re 1 V/Pa) ±3 dB
EXTENSION CABLES	Up to 100 m in length between the microphone preamplifier and HBK 2255, without degradation of the specifications
MICROPHONE DETECTION	Attached microphones are automatically identified and configured using TEDS (transducer electronic data sheet). When Type 4966 is attached, the instrument automatically detects the presence of windscreen UA-1650 and corrects for it
MICROPHONE DATABASE	Microphones are described in a database on the instrument: type, serial number, sensitivity, sound field and additional information. The instrument is set up automatically in accordance with the selected microphone.

Input settings

CORRECTION FILTERS

The software is able to correct the frequency response to compensate for sound field and accessories

Microphone	Type 4966-Z-041	Type 4952
Sound field	Free or diffuse	Free (0° or 90°) or diffuse
Accessories	Windscreen UA-1650 (auto. detection)	Windscreen UA-1700

SELF-GENERATED NOISE LEVEL

Typical values at 23 °C for nominal microphone open-circuit sensitivity

		Microphone	
		Type 4966-Z-041	Type 4952
A-weighting	**Microphone** **Electrical** **Total**	14.9 dB 9.1 dB 15.9 dB	15.0 dB 19.9 dB 21.1 dB
B-weighting	**Microphone** **Electrical** **Total**	13.7 dB 9.6 dB 15.2 dB	13.9 dB 18.8 dB 20.0 dB
C-weighting	**Microphone** **Electrical** **Total**	13.8 dB 13.2 dB 16.5 dB	14.0 dB 20.1 dB 21.1 dB
Z-weighting	**Microphone** **Electrical** **Total**	15.5 dB 19.8 dB 21.2 dB	15.4 dB 25.9 dB 26.3 dB

Measuring ranges

		Microphone	
		Type 4966-Z-041	Type 4952
DYNAMIC RANGE From typical noise floor to max. level for a 1 kHz pure tone signal	**A-weighted**	23.2 to 140.3 dB	24 to 141 dB
PRIMARY INDICATOR RANGE In accordance with IEC 60651	**A-weighted**	21.9 to 123 dB	22.2 to 123.4 dB
LINEARITY RANGE In accordance with IEC 60804	**A-weighted**	19.8 to 141.5 dB	20.1 to 141.9 dB
LINEAR OPERATING RANGE In accordance with IEC 61672	**A-weighted, 1 kHz**	23.2 to 140.3 dB	31.1 to 140.7 dB
	C-weighted, 1 kHz	26.5 to 140.3 dB	31.3 to 140.7 dB
	Z-weighted, 1 kHz	32.7 to 140.3 dB	37.1 to 140.7 dB
PEAK C RANGE In accordance with IEC 61672	**1 kHz**	43.3 to 143.3 dB	44.8 to 143.7 dB

Calibration

Initial calibration is stored for comparison with later calibrations

ACOUSTIC	Using Sound Calibrator Type 4231 or custom calibrator. The calibration process automatically detects the calibration level when Sound Calibrator Type 4231 is used
CHARGE INJECTION CALIBRATION (CIC)	Injects an internally generated electrical signal at three frequencies (125, 1000 and 4000 Hz) in parallel with the microphone diaphragm • A manual CIC check can be performed whenever there is no measurement in progress • An automatic CIC check can be performed at the start and end of a logging measurement
CALIBRATION HISTORY	Calibrations and calibration checks are listed and can be viewed on the instrument

Analysis – Setup mode: SLM

DETECTORS

Parallel detectors on every measurement

A, B, C or Z	Three simultaneous broadband frequency weightings, and two simultaneous frequency weightings for frequency analysis. F, S and I exponential time weightings, linear averaging and peak detector simultaneously for each frequency weighting
Overload detector	Monitors the overload outputs of all the frequency weighted channels

BROADBAND PARAMETERS

X = frequency weightings A, B, C or Z, up to three weightings in parallel
Y = time weightings F or S

		Noise Partner	Enviro Noise Partner	Work Noise Partner	Product Noise Partner
Licence		BZ-7300	BZ-7301	BZ-7302	BZ-7303
Instantaneous parameters for display only	L_{XY}	✓	✓	✓	✓
	$L_{XY(SPL)}$	✓	✓	✓	✓
	$L_{Xpeak,1s}$	✓	✓	✓	✓
Parameters for display and storage	Totals	✓	✓	✓	✓
	Logging		✓	✓	
	L_{XYmax}	✓	✓	✓	✓
	L_{XYmin}	✓	✓	✓	✓
	L_{Xpeak}	✓	✓	✓	✓
	L_{Xeq}	✓	✓	✓	✓
	L_{Aleq}	✓	✓	✓	✓
	L_{AImax}	✓	✓	✓	✓
	L_{XE}		✓	✓	✓
	L_{AFTeq}		✓		
	L_{avS4}			✓	
	L_{avS5}			✓	
Statistics 5 user-defined percentiles	L_{AN}		✓	✓	✓
	L_{AYN}		✓	✓	✓

SPECTRUM PARAMETERS

1/1-octave only, 1/3-octave only or both 1/1- and 1/3-octave frequency analysis
X = frequency weightings A, B, C or Z, up to two weightings in parallel
Y = time weightings F or S

		Noise Partner	Enviro Noise Partner	Work Noise Partner	Product Noise Partner
Licence		BZ-7300	BZ-7301	BZ-7302	BZ-7303
Instantaneous parameters for display only	L_{XY}		✓	✓	✓
Parameters for display and storage	Totals		✓	✓	✓
	Logging		✓	✓	
	L_{XYmax}		✓		✓
	L_{XYmin}		✓		✓
	L_{Xeq}		✓	✓	✓
	$L_{Xeq(f1-f2)}$		✓		
Statistics 5 user-defined percentiles	L_{AN}		✓		
	L_{AYN}		✓		

GPS DATA

Latitude, Longitude	Precision of coordinates given as ±xx m

AUDIO

Analysis-quality audio recording is enabled with the BZ-7451 licence.

	Listen-quality	Analysis-quality
Audio format	MP3	FLAC (free lossless audio codec)
Recording control	• For duration of measurement • Triggered by app • Triggered by up to four level trigger conditions	• For duration of measurement • Triggered by app • Triggered by up to four level trigger conditions
Storage	Audio recordings are stored on the instrument and transferred with measurement to PC or iOS app	
File Size	Variable bit rate, approximately 22 MB per hour. Files are compressed to 3% of original signal. 24-bit covering full measurement range	The format retains all of the information in the raw time signal while reducing file size. Low-level signals are typically compressed down to approximately 15% of the original signal size, while high-level signals are typically compressed to approximately 60% of the original signal size. 24-bit, 65 kHz

Analysis – Setup mode: Building Acoustics

The Building Acoustics setup mode is enabled with the BZ-7350 licence.
Note: Measurements can be made with or without connection to the Building Acoustics Partner mobile app

LEVEL MEASUREMENTS	• L_{ZF} spectrum for display only • L_{Zeq} in 1/1-octave or 1/3-octave bands	
REVERBERATION TIME MEASUREMENTS	T20, T30 and EDT in 1/1-octave or 1/3-octave bands	
	Decays	L_{Zeq} spectra sampled at 4 ms intervals
	Evaluation range	**T20**: −5 to −25 dB **T30**: −5 to −35 dB **EDT**: 0 to −10 dB
	Measurement time	Automatic selection of measurement time for the decays based on the actual reverberation time of the room
	Max. meas. time	From 2 to 20 s
	T20, T30 and EDT calculation	From slope in evaluation range
	Slope estimation	Least squares approximation
	Reverberation time range	• Max.: 30 s • Min.: 0.1 to 0.7 s Depends on bandwidth and centre frequency

Hardware interface

CONTROL BUTTONS	7 buttons optimized for measurement control and screen navigation
ON-OFF BUTTON	• On: 1 s press • Off: 2 s press • Forced reboot: 45 s press
STATUS INDICATORS	LED light ring visible from a distance, and from most angles: Red, yellow, green, blue, purple
DISPLAY	Transflective back-lit colour 240 × 320 dot matrix. Adjustable power settings
DISPLAY BACKLIGHT	Adjustable level
USB INTERFACE	Multi-purpose USB-C Connector: Battery charge, input from weather station, data transfer, output signal (frequency-weighted input signal or DC voltage corresponding to measured L_{AF}, L_{BF}, L_{CF} or L_{ZF} level)
CLOCK	System time updated from GPS when possible. • Accuracy when locked onto GPS: ≤ ± 1ms • Drift when GPS unavailable: <0.26 s per 24-hour period (±3 ppm)

Measurement control

FREE SETTING	Manually controlled single measurement
PRESET SETTING	Preset measurement time from 1 second to 31 days in 1 s steps (exactly 31 days, 23 hours, 59 minutes and 59 seconds, that is 31.23.59.59)
MANUAL CONTROLS	Start, Pause, Continue and Stop the measurement manually
BACK-ERASE	The last 1 to 10 s of data can be erased without resetting the measurement

Measurement Status

ON SCREEN	Information such as overload and running/paused are displayed on screen as icons	
MEASUREMENT STATUS LIGHT RING RGB light ring shows the measurement status and instantaneous overload as follows	**Green on constantly:**	Measuring
	Yellow flashing every 5 s:	Stopped, ready to measure
	Yellow flashing slowly:	Paused, measurement not stored
	Red flashing quickly:	Intermittent overload, calibration failed
	Purple on constantly:	Latched overload
	White flashing slowly:	Instrument off and charging
	Blue flashing quickly:	Pairing with mobile device

Displays on instrument

SLM VIEW	One quasi-analogue instantaneous bar and one broadband value
LIST VIEW	One quasi-analogue instantaneous bar and three broadband values
SPECTRUM VIEW*	1/1- and/or 1/3-octave spectrum column graph with cursor readout – for one or two parameters simultaneously. Configurable Y-axis
PROFILE VIEW*	Graphical profile for one broadband parameter at a time. Movable cursor for last 100 logging samples. Configurable Y-axis
REVERBERATION VIEW*	1/1- and/or 1/3-octave reverberation time spectrum column graph with cursor readout – for one or two parameters simultaneously. Configurable Y-axis
ABOUT DATA VIEW	Latitude, longitude, microphone used, microphone sensitivity, calibrated date, time zone, software version and hardware version for current measurement

* With optional licence

Software interface

PREFERENCES	Date, time and number formats can be specified
LANGUAGE	User interface in Danish, English, French, German, Italian, and Spanish
HELP	On app: Concise context-sensitive help in English, French, German, Italian and Spanish
UPDATE OF SOFTWARE	Update to latest version via Internet*
REMOTE ACCESS	Connect to the instrument via mobile device downloaded with: • Noise Partner BZ-7300 • Other optional apps also available – See "Ordering information" Remote display (non-interactive) via internal web server

* For instruments with WELMEC compliant firmware variants, updates must be performed at an HBK service centre.

Data management

INTERNAL STORAGE	16 GB (approximately 13 GB formatted space available for measurement and annotation data)
MEASUREMENT DATA	Measurements are automatically stored at measurement stop. Data is stored in folders by date, with individual measurements numbered sequentially
ANNOTATION DATA	Annotations (photos, videos, text and voice notes) made using the Noise Partner mobile app are embedded into measurement data and stored on the instrument
DATA RETENTION	The instrument can be configured to move data (that has been backed up) automatically to trash after a user-defined retention period
BACKUP	Measurement and annotation data can be automatically backed up to a USB stick or server message block (SMB) network share
INTERNAL STORAGE* CAPACITY	The internal disk can hold up to 600,000 single measurements with just one broadband parameter, or up to 200,000 single measurements with all broadband parameters, including broadband and spectral statistics and ten 1/3-octave spectra. The internal disk can hold 6 months logging of all broadband parameters, including broadband statistics and ten 1/3-octave spectra, with 1 s intervals, or 25 days when audio recording in listen quality is stored too (5 days with analysis quality audio)

* Statistics, frequency analysis, audio recordings, and logging features are only available with additional software licences installed.

Wireless communication interface

OPERATING FREQUENCY	2.4 GHz
DATA RATE	IEEE 802.11n: Up to 300 Mbps
	IEEE 802.11g: Up to 54 Mbps
	IEEE 802.11b: Up to 11 Mbps
ENCRYPTION/ AUTHENTICATION	64/128-bit WPA-PSK, WPA2-PSK, TLS, SSL
RANGE	The range is similar to a standard WLAN unit, typically from 10 to 50 m (33 to 164 ft), depending on the environment and the number of other WLAN transmitters in the area (smartphones, Wi-Fi, etc.)
BLUETOOTH CONNECTION	Bluetooth® Low Energy (BLE) to discover and connect devices, allowing for simpler connections on Wi-Fi, etc. Not used for transporting measurement data or audio

Wired communication interface

CONNECTIONS	USB-C, Ethernet over USB
DATA RATE	150 Mbps
ENCRYPTION/ AUTHENTICATION	TLS, SSL

Battery

CAPACITY	6700 mAh nominal, 24 Wh
OPERATING TIME	Typically >13 h with Wi-Fi® enabled
CYCLE LIFE	Min. 80% battery capacity available after 500 complete charge/discharge cycles
INDICATOR	Remaining battery capacity and expected working time may be read out in % or hours
FUEL GAUGE	The instrument is equipped with a built-in fuel gauge that continuously measures and stores the actual battery capacity in the battery unit
CHARGE TIME	Using ZG-0486, typically <6 hours from empty at normal room temperature. When using a power source other than ZG-0486, the charging time will vary depending on the current delivered by the source **NOTE:** It is not recommended to charge the battery at temperatures below 0 °C (32 °F) or over 50 °C (122 °F). Doing this will reduce battery lifetime

Supplied charger

PART NO.	ZG-0486
INPUT	100 – 240 VAC, 50/60 Hz, 0.45 A
OUTPUT	5.0 VDC, Max. 2.4 A
SUPPLIED CABLE	USB 3.1, USB-C® connector to USB-A connector

Physical

START-UP TIME	From power off: <30 s
OPERATING TEMPERATURE	–25 to +70 °C (–13 to +158 °F)
WEIGHT	With preamplifier and microphone: 409 g (14 oz) Without preamplifier and microphone: 367 g (13 oz)
DIMENSIONS	With preamplifier and microphone: 281 × 68 × 37 mm (11.1 × 2.7 × 1.5″) Without preamplifier and microphone: 213 × 68 × 37 mm (8.4 × 2.7 × 1.5″)
DUST AND WATER RESISTANCE	In compliance with IP 54

Standards

NOTE: The international IEC standards are adopted as European standards by CENELEC. When this happens, the letters IEC are replaced with EN and the number is retained. The instrument also conforms to these EN standards

The sound level meter part of HBK 2255 conforms to the following national and international standards and classes/types/groups with the standard accessories and configurations:

IEC – INTERNATIONAL ELECTROTECHNICAL COMMISSION (Commission électrotechnique internationale)	IEC 61672-1:2002-05 class 1, group X/Z
	IEC 61672-1 (2013) class 1, group X/Z
	IEC 60651 (1979) plus Amendment 1 (1993-02) and Amendment 2 (2000-10), type 1, group X/Z
	IEC 60804 (2000-10), type 1, group X/Z
	PTB approved (1.2.0.1151) Certificate number: DE-22-M-PTB-0058*
	LNE approved (1.x.0.yyyy)
DIN – DEUTSCHES INSTITUT FÜR NORMUNG E.V. (the German Institute for Standardization)	DIN 45657 (1997-07)
	DIN 45657 (2014-07)
ANSI – AMERICAN NATIONAL STANDARDS INSTITUTE	ANSI S1.4-1983 plus ANSI S1.4A-1985 Amendment, type 1
	ANSI/ASA S1.4, Part-2014, class 1, group X/Z
	ANSI S1.43 – 1997, type 1

* Find a link to compliance and type approval documentation at www.bksv.com/2255

The frequency analysis* part of HBK 2255 conforms to the following additional national and international standards and classes/types/groups:

IEC – INTERNATIONAL ELECTROTECHNICAL COMMISSION	IEC 61260:1995-07 (plus Amendment 1 (2001-09)), 1/1-octave bands and 1/3-octave bands, Class 0, group X/Z, all filters
	IEC 61260-1:2014, 1/1-octave bands and 1/3-octave bands, class 1, group X/Z, all filters
ANSI – AMERICAN NATIONAL STANDARDS INSTITUTE	ANSI S1.11-2004, 1/1-octave bands and 1/3-octave bands, class 0, group X/Z, all filters
	ANSI/ASA S1.11-2014/Part 1, 1/1-octave bands and 1/3-octave bands, class 1, group X/Z, all filters

* Frequency analysis features are only available with additional software licences installed.

The firmware is made in accordance with:

EUROPEAN COOPERATION IN LEGAL METROLOGY – WELMEC	WELMEC 7.2 Software Guide - 2014

Standard bundles

		2255-B-S SLM with Building Acoustics	2255-B-SC SLM with Building Acoustics & Calibrator	2255-E-S SLM with Enviro Noise	2255-E-SC SLM with Enviro Noise & Calibrator	2255-N-S SLM with Noise Partner	2255-N-SC SLM with Noise Partner & Calibrator	2255-P-S SLM with Product Noise	2255-P-SC SLM with Product Noise & Calibrator	2255-W-S SLM with Work Noise	2255-W-SC SLM with Work Noise & Calibrator
	HBK 2255 Sound Level Meter	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
SOFTWARE	**BZ-7300** Noise Partner	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
SOFTWARE	**BZ-7301** Enviro Noise Partner			✓	✓						
SOFTWARE	**BZ-7302** Work Noise Partner									✓	✓
SOFTWARE	**BZ-7303** Product Noise Partner							✓	✓		
SOFTWARE	**BZ-7350** Building Acoustics Partner	✓	✓								
SOFTWARE	**BZ-7400** Open Interface	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
ACCESSORIES	**Type 4231** Sound Calibrator		✓		✓		✓		✓		✓
ACCESSORIES	**Type 4966-Z-041** ½″ Free-field Microphone (microphone cartridge + preamplifier combination)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
ACCESSORIES	**ZG-0486** Mains Power Supply	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
ACCESSORIES	**AO-0821-D-010** USB 3, USB C to USB A Cable	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
ACCESSORIES	**UA-1650** 90 mm dia. Windscreen with AutoDetect	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
ACCESSORIES	**DH-0819** Wrist Strap, for sound level meter	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
ACCESSORIES	**UA-2237** Mobile Phone Holder Kit	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

Firmware variants

HBK 2255 has three firmware variants. In countries where a WELMEC-compliant instrument is required for legal metrology (currently Germany and Spain), the WELMEC firmware variant for that country should be selected. For all others who require a type-approved SLM, the standard variant should be suitable

FW-2255-000 General type-approved firmware (standard)
FW-2255-001 WELMEC type-approved firmware, Germany
FW-2255-002 WELMEC type-approved firmware, Spain

For more information on HBK 2255 firmware variants and versions, go to www.bksv.com/2245-2255-updates.

Software modules available separately

Purchase licences separately to build a custom solution

BZ-7301 Enviro Noise Partner Licence (see product data BP 0030)
BZ-7302 Work Noise Partner Licence (see product data BP 0031)
BZ-7303 Product Noise Partner Licence (see product data BP 2643)
BZ-7350 Building Acoustics Partner Licence (see product data BP 2680)
BZ-7401 Extended Broadband Analysis Licence
BZ-7402 Logging Licence
BZ-7403 Frequency Analysis Licence
BZ-7404 MP3 Audio Licence
BZ-7450 Advanced Logging Licence, for HBK 2255 only
Requires the basic logging capabilities included in the Enviro Noise Partner, Work Noise Partner or Logging Licences
BZ-7451 Analysis Quality Audio Licence, for HBK 2255 only

All mobile apps are available for download via the App Store.
All desktop PC apps can be downloaded at www.bksv.com

Building acoustics kits

	SOUND SOURCES				SOUND LEVEL METER BUNDLES		ACCESSORIES	
	4292-L OmniPower Sound Source, includes tripod and carrying bags	**AQ-0673** Speaker Cable, Type 4292-L to HBK 2755	**2755** Smart Power Amplifier	**3207-A** Tapping Machine with Battery Kit	**2255-B-S** SLM with Building Acoustics Partner Software	**2255-B-SC** SLM with Building Acoustics Partner Software and Sound Calibrator Type 4231	**UA-0049** Rigid Microphone Extension for HBK 2255	**KE-0003** Backpack for Building Acoustics Kit
2255-B-K01 HBK 2255 Building Acoustics Kit (Airborne)	✓	✓	✓		✓		✓	✓
2255-B-K02 HBK 2255 Building Acoustics Kit (Airborne and Impact)	✓	✓	✓	✓	✓		✓	✓
2255-B-KC1 HBK 2255 Building Acoustics Kit with Calibrator Type 4231 (Airborne)	✓	✓	✓			✓	✓	✓
2255-B-KC2 HBK 2255 Building Acoustics Kit with Calibrator Type 4231 (Airborne and Impact)	✓	✓	✓	✓		✓	✓	✓

Accessories available separately

INTERFACING HARDWARE

UL-1073	4.7″ App Control Unit, 32 GB
AO-0846	USB-C to AC or DC Output Cable, with power
AO-0414	Microphone extension cable, up to 30 m
UA-0049	Rigid microphone extension rod

CALIBRATION HARDWARE

4231	Sound Calibrator Note: The case for HBK 2255 has storage space for Type 4231

MOUNTING HARDWARE

UA-0750	Tripod
UA-0801	Lightweight Tripod
UA-1651	Tripod Extension

HBK service products

ACCREDITED CALIBRATION

SLM-STD-CAI	Initial Accredited Calibration incl. microphone (according to IEC 61672)
SLM-STD-CAF	Accredited Calibration incl. microphone (according to IEC 61672)

For more information about our calibration services, go to www.bksv.com/Service/Calibration-and-verification

SERVICE

Standard Product Warranty: Two years
Calibration Plus Service Contract: Calibration contract with up to 5 years coverage, extended warranty for sound level meters up to 10 years old, plus more. For details, go to www.bksv.com/calibration/calibration-plus
Extended Warranty Contract: Extend your standard product warranty up to 10 years. For details, go to www.bksv.com/extended-warranty-hardware
Online Service: Online services such as downloading your calibration certificate and scheduling your services. Access the calibration cloud at www.bksv.com/calibrationdata

NOTE: Wear and tear on parts like windscreens and cables are not covered by the Standard Product Warranty or Extended Warranty.

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