

Data sheet **dsound**[®] **USS5-LS**

Universal sound sensor for precise frequency-selective monitoring of air-borne sound in industrial environments.

Product description

- Integral, high quality electret microphone
- Powerful, parameter stable signal processing by digital signal processor that is integrated in the sensor
- Adjustment of gain, frequency band, smoothing time and desired switching function via simple menu navigation directly on the sensor
- Analog output for direct connection to a monitor or headphones or output of the measured rms value / peak
- Potential free output and synchronization input for direct PLC connection
- RS485-interface

Application areas

Preferably Signals with a low harmonic content, acoustic noise / functional testing and process monitoring



Machine, plant and tool monitoring

(whistling, grinding, buzzing, roaring)

Recognition „tool in the section“, missing material, imbalance, leakages, solids in fluids, worn tools



Process monitoring

(banging, rushing, hissing)

Detection of lead fracture during arc welding, waterjet cutting abrasive ratio, material flow in pipes, leakage, parts counting



Monitor assembling processes

(interlocking, snapping, bottoming)

Connector assembly, popping or snapping of retaining rings or locking lugs, snap-in mounting of housings, fixed stop monitoring



Material fracture detection

(Cracking, tearing)

Foil / veneer cracks, broken glass, bursting of PET bottles



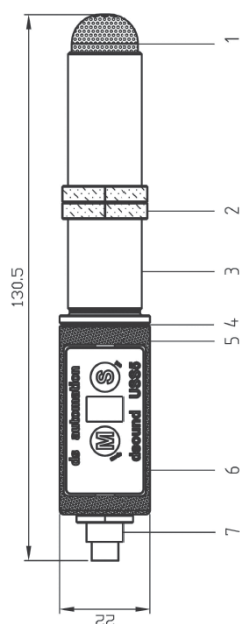
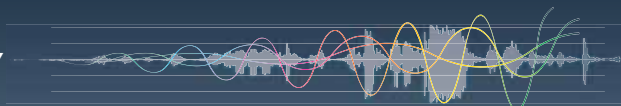
Equipment testing

(clicking, squeaking, grinding)

Monitoring of keyboard clicks, acoustic signals, acoustic emission during switching processes and motor movements

General Noise Monitoring

Room monitoring, monitoring of noise emission (units and plants)



Technical data

Sound sensor for airborne sound signals from 30 Hz to 12.5 kHz

Integral microphone

Parameterization via integrated control panel

1 switching output (potential-free), 1 synchronization input, RS485

Analog output: RMS or noise signal, 1 switching output

Supply: 10 ... 30 VDC

8-pin sub-miniature circular connector M9 x 0.5

Robust, compact housing (M18 x 1) x 130 mm (IP67)

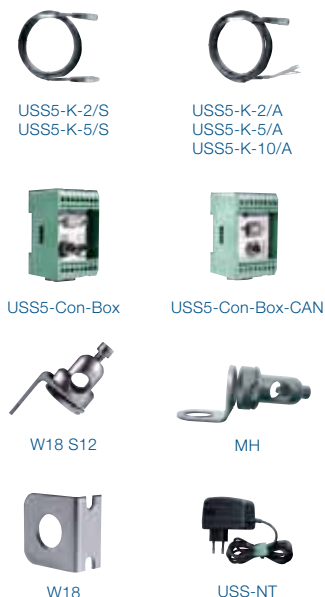
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|-------------------------------------|---|
| 1. Interchangeable microphone cover | 5. Housing cover (ABS) |
| 2. Nuts M18x1 | 6. panel |
| 3. Housing (VA) M18x1 | 7. Subminiature circular connectors M9 x 0.5, 8-pin |
| 4. Flat seal NBR65 | |

Order information

USS5-LS Sound Sensor dsound[®] USS5 airborne sound



Accessories



USS5-K-2/S
USS5-K-5/S

USS5-K-2/A
USS5-K-5/A
USS5-K-10/A

USS5-Con-Box

USS5-Con-Box-CAN

W18 S12

MH

W18

USS-NT

USS5-K-2/A	or USS5-K-5 / A or USS5 K-10 / A (description below)	Needed
<i>For rail mounting:</i>		
USS5-Con-Box	Connection box for sound sensor dsound [®] USS5 (in connection with USS5-K-2/S or USS5-K-5/S)	Mounting
USS5-Con-Box-CAN	Connection box for sound sensor dsound [®] USS5 with CAN USB RS485 router function (in connection with USS5-K-2/S or USS5-K-5/S)	
W18S12	Rotatably mounting system (VA, for mounting on Ø12 mm Round Profile)	
W18	Mounting system rigidly (VA)	Connection technology
MH	Rotating microphone holder including sensor spacer and thread reducing (5/8 to 3/8 inch)	
USS-NT	Optional power unit to supply the sensor	
USS5-K-2/S (2m) USS5-K-5/S (5m)	Connection cable for USS5 8-pin, shielded, socket M9 x 0.5 / connector M9 x 0.5	
USS5-K-2/A (2m) USS5-K-5/A (5m) USS5-K-10/A (10m)	Connection cable for USS5 8-pin, shielded, socket M9 x 0.5 / single wires with ferrules	

Please send your questions and orders to:



ds automation gmbh · Mettenheimerstr. 2 · 19061 Schwerin
Fon: +49 (0)385 20840-0 · Fax: +49 (0)385 20840-10
Mail: info@dsautomation.de · Web: www.dsautomation.de