

Casella dBadge2 IS Pro - Personal Noise Dosimeter



Casella dBadge2 Pro Personal Noise Dosimeter - Available for rental, hire and purchase from Ashtead Technology.

Intrinsically Safe with Bluetooth connectivity and octave band analysis, the Casella dBadge2 Pro is an advanced personal noise dosimeter which is available for rental and purchase.

Designed to be capable of meeting the latest 2014 revisions of the globally recognised IEC 60079 series standard, the dBadge2 Pro is ATEX Approved and Intrinsically Safe, making it suitable for use in potentially explosive areas in the oil and gas, petrochemical and pharmaceutical industries

Typically found on handheld sound level meters, the dBadge2 Pro can also provide real-time Octave Band frequency Analysis. LEQ and LMAX values are displayed in either a graphical or table format and provide additional information which can then be used to decide on the appropriate control methods required for managing hearing protection.

Using the Airwave App, you can remotely monitor the dBadge2 Pro via a mobile or tablet device. Available on Apple and Android devices, the Airwave App provides you with data directly from the dBadge2 - this is particularly useful if you're working at a separate location or cannot disturb the end user. For easier reporting, the data can be emailed (along with any pictures or notes) directly to PC.

The dBadge 2 Pro measures in accordance with L108 Controlling Noise at Work and is capable of recording audio clips. You're able to store up to 15 seconds of voice notes and can set parameters to trigger an audio recording when a limit is exceeded.

Weighing only 117g the dBadge2 Pro is suitable for all day use and has an exceptionally long battery life. Depending on the mode you're using, the unit can run for up to 35 hours.

Rents with: dBadge2 Pro, 3-way combined Docking Station, Charger, Mains lead, USB cable and Casella Insight data management software and kit case. Calibrator also available.

Renting the Casella dBadge2 Pro

Available on a short or long term basis, the Casella dBadge2 Pro will arrive fully calibrated and ready to go straight out of the box. Once your job is complete, you can either return the equipment to us, or contact us to arrange a collection. It's that simple!

Key features

- **Personal Sound Level Meter**
- **Standards:** L108 Controlling Noise at Work (UK)
- **Intrinsically Safe:** Yes - designed to be used in potentially explosive areas
- **Octave Band Analysis:** Yes - nine octave bands 31.5Hz to 8 KHz, A or Z weighted LEQ (nHz) and LMAX(nHz)
- **Audio Recording:** Yes - store up to 15 seconds of voice notes
- **Triggered Audio Recording:** record the actual noise associated with triggered events
- **Reporting:** Real-Time Display + Bluetooth Connectivity for remote analysis (connects with mobile and tablet). Connects to PC via USB
- **Battery Life:** 35 hours using Broadband Mode, 15 hours using Octave Mode

Applications

- Controlling Noise at Work
- Identification of noise sources
- Selection of hearing protection
- Complete shift exposure measurements

Purchasing the Casella dBadge2 Pro

As an authorised reseller for Casella Instruments, we're able to offer extremely competitive rates for the Casella dBadge2, dBadge2 Plus and dBadge2 Pro Personal Noise Dosimeters. Our trained sales team will be able to advise you on which unit is most appropriate for your requirements and provide you with technical support when your unit arrives.

Technical specification

Standards:	ANSI S1.25:1991 R2007, IEC 61252 Ed 1.1 (2002-3)
Linear Operating Range:	55.0-140.3 dB (A) RMS
Dynamic Range:	96dB
Peak Measurement Range:	90.0-143.3dB (C or Z weighted)
Sound Exposure Range:	0.0- 6,100.0 Pa2Hours
	0.00 - 22,000,000.00 Pa2Sec
	0.0-100,000.0% Dose
Frequency Weightings:	A, C and Z, Type 2
Time Weightings:	Fast, Slow and Impulse
Exchange Rate:	Q=3 or Q=5dB exchange rates
Threshold:	70-90dB in 1dB steps (Set via Casella Insight Data Management Software)
Criterion Level:	70-90dB in 1dB steps (Set via Casella insight Data Management Software)
Real Time Clock:	Accuracy better than 1min per month
Under Range Indication:	1dB below the bottom of the range
Overload Indication:	140.4dB RMS
Peak Overload Value:	143.4dB Peak
Stabilisation Time:	<3 seconds after power up
Operating Temperature Range:	0°C to +40°C (for $\pm 0.5\text{dB}$ error limit) -10°C to +50°C (for $\pm 0.8\text{dB}$ error limit)
Ambient Pressure Range:	$\pm 0.5\text{dB}$ over 85 - 112kPa
Humidity range:	$\pm 0.5\text{dB}$ over 30% - 90% (non-condensing)
Magnetic Fields:	Negligible
Storage Temperature Range:	-10°C to +50°C
Battery:	Internal NiMH, 800mAH
Run time:	Typically 35 hours using Broadband Mode Typically 15 hours using Octave mode
Charge Time:	<6 Hours from fully discharged
Maximum Run Duration:	24 hours
Maximum number of Runs:	100
Storage Capacity:	Internal USD Flash memory - 300 hours of run data (including 1 second profile data) and up to 90 minutes of event audio recording.
PC Interface:	USB 2.0 Full speed 12Mbps via Docking Station.
Environmental I.P. Rating:	IP65 (with permeable air vent)
Construction Materials:	Plastic Case/ Charger - PC/ABS Mounting Clips - POM Gasket - Silicone Display window - Acrylic Foam Windscreen - Polyester foam Microphone - Brass / Nickel
Audio events recording	Settable level will trigger the recording mode which provides an 8kHz sampling rate in a 16 bit compressed .WAV format. Playback is via the Casella Insight PC application or other media player. Each audio event will record for 10 seconds and includes a 3
Audio Notes	Optional audio note of up to 15 seconds attached to each measurement run.
Octave Analysis	Nine octave bands 31.5Hz to 8 KHz, A or Z weighted LEQ (nHz) and LMAX(nHz) cumulative data is saved for each run. Fast or Slow time constant can be selected for LMAX
Display:	<u>96x64 dots full colour OLED display with adjustable contrast</u>
User Control:	Two button operation. Remote Start/Stop/Pause using Airwave App
Bluetooth Connectivity	
TX power:	7 0 dBm to -23 dBm

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Receiver sensitivity:	-93 dBm
Range:	Typically 25m line-of-sight and depending on local RF conditions

Dimensions

Description	mm	inch	kg	lbs
Casella dBadge2 Pro	85 x 54 x 55 mm	3.34 x 2.13 x 2.16 in	0.117 kg	

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