

Mobile Sound Level Measurement for BESS

Standards-compliant acoustic measurement for the planning, permitting and operation of BESS facilities.



Challenge

Battery Energy Storage Systems (BESS) operate around the clock, generating noise emissions that vary depending on location and operating conditions. Compliance with regulations must be reliably demonstrated. Early identification of noise sources secures permits, builds acceptance and enables targeted optimisation.

Main noise sources in BESS facilities



Cooling system
Fans,
HVAC systems,
pumps



Inverter
Fan noise,
high-frequency
electrical tones



Transformer
Low-frequency
hum and
harmonics



Enclosures
Resonances,
airborne noise
emissions

Solution

acoust IQ enables standards-compliant acoustic assessment of BESS facilities. Mobile, precise and digital.

1 Measure

Class 1 measurement of all relevant parameters



- Sound pressure level
- Frequency analysis
- Time histories
- Psychoacoustics

Measurement context:
Markers
Notes
Photos
GPS-Position

2 Compare

Systematically compare operating conditions



Standby



Charging



Discharging



Full load



Summer operation



Night operation

3 Manage

Store and share measurement data centrally via cloud



- Cloud upload & storage
- Web-based data management
- Online data processing
- User & project management

4 Reporting

From measurement to finished PDF in 3 steps



Benefits

- ✓ Mobile Class 1 measurement – fast and reliable
- ✓ Robust data for objective decision-making
- ✓ Cloud-based collaboration across locations
- ✓ Legally compliant documentation for authorities and assessors
- ✓ Lower project risks through early acoustic assessment

Typical Applications



Site assessment



Acceptance
& commissioning



Product development



Operational monitoring

acoust IQ
by MÜLLER-BBM

acoust IQ combines a Class 1 microphone, iOS app and cloud into an end-to-end platform for acoustic measurements.

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Get started:

