MCERTS for construction-site PM monitoring (Sensorbee Pro2): two valid ways to use the data

Sensorbee Pro2 is MCERTS certified for PM2.5 and PM10 as an *Indicative Ambient Particulate Monitor*. MCERTS "indicative" certification supports two different use-cases, and it's important to be clear which one your project requires.

Option 1 (Standard): MCERTS Indicative Monitoring – "Qualitative mode" (factory calibration)

What it is:
This is MCERTS-compliant use of an indicative monitor for trend analysis and dust management. The MCERTS certificate explicitly allows qualitative measurements relying on factory calibration.

What you can use it for on a construction site:

- Live visibility of PM trends
- Alerts and trigger levels
- Demonstrating proactive dust management
- Source / activity insight (time-of-day patterns, wind-direction context, "dust roses")

How to describe the numbers (important):
We provide *indicative* PM readings (often displayed in µg/m³), intended for operational control and understanding trends—not as a site-calibrated "reference-grade" concentration.

Suggested proposal wording (copy/paste):

> **MCERTS indicative monitoring (qualitative mode):** Sensorbee Pro2 is MCERTS certified as an Indicative Ambient Particulate Monitor (PM2.5 / PM10). Rental service provides indicative PM data for trend analysis, alerts and dust-management decision making. This mode relies on the instrument's factory calibration as permitted under MCERTS for qualitative measurements.

One-sentence "expectation setting"

Use this whenever someone says "we need MCERTS" without details:

"Yes—Sensorbee Pro2 is MCERTS certified (indicative). Our standard package is MCERTS qualitative (trend/alert) monitoring."

Calibration/service exchange interval for Sensorbee Pro2 and the PM module is in accordance with the MCERTS certificate is: **Replacement every 24 months**

Option 2 (Upgrade): MCERTS Indicative Monitoring – "Quantitative mode" (site co-location calibration)

What it is:
If you want to claim quantitative concentrations with MCERTS-defined indicative uncertainty (±50%), MCERTS requires each instrument to be calibrated on the specific site by co-locating against a standard reference method (or equivalent) for two weeks, and then applying the resulting slope/intercept to the instrument calibration.
That calibration must be repeated at least every 12 months or when the instrument is moved.
MCERTS also states that non-standard filters/procedures for calibration are not acceptable.

What reference instrument could be used (example):
A good, commonly used choice for co-location is a Met One BAM 1020 (including "smart/heated" configurations where appropriate). The BAM 1020 is explicitly used as the reference method in MCERTS field testing for some indicative monitors.

Why this is usually not practical for construction projects:
A two-week on-site co-location using a reference-grade analyser changes the job into a different class of monitoring (extra equipment, secure siting, power, servicing, QA/QC, mobilisation/demob). For short projects, that overhead can be disproportionate unless the contract explicitly demands quantitative site-calibrated results.

Suggested proposal wording (copy/paste):

> **MCERTS quantitative mode (optional upgrade):** Where a project specification requires quantitative indicative concentrations, MCERTS requires a site-specific calibration: each Sensorbee unit must be co-located on the project site against a standard reference method (or equivalent) for two weeks, and the resulting slope/intercept applied for calibration. This calibration must be repeated at least annually or if the unit is moved site. A suitable reference-grade co-location instrument is, for example, a Met One BAM 1020.

One-sentence "expectation setting"

Use this whenever someone says "we need MCERTS" without details:

"Yes—Sensorbee Pro2 is MCERTS certified (indicative). Our standard package is MCERTS qualitative (trend/alert) monitoring.

If your contract needs MCERTS quantitative concentrations, that requires a two-week on-site co-location calibration against a reference analyser (e.g., BAM 1020), which we can also provide as an upgrade."