

Dust Monitoring - DS100

Sticky Pad Directional Dust Gauge

The DustScan DS100 is a low-cost, passive, directional sticky pad dust gauge that has been in use since 2004. It is unobtrusive, simple to install and operate and is widely used across industry both in the UK and abroad. The sticky pad samples fugitive dust from the full 360° around the gauge sampling head; the samples are subsequently assessed in 24, 15° intervals. The sampling head is oriented to north during the gauge installation to enable the directions from which dust arrives on the sticky pad to be determined.

The DS100 is ideal for:-

- Site boundary monitoring
- Locating fugitive dust pathways
- Assessing dust suppression/mitigation measures
- Dust annoyance investigations
- Baseline dust monitoring
- Compliance monitoring
- Dust modelling and mapping studies

DS100 monitors do not need a power supply and operate continuously in all weather conditions. Sampling heads are typically changed every 7 or 14 days. In very dusty arid environments it may be appropriate to change sampling heads every 3 or 4 days.

DustScan directional analysis generates AAC% and EAC% values by electronic scanning for each 15° segment of the sticky pad. AAC% and EAC% refers to measures of dusting which are detailed in Brochure A1 Directional Analysis and Reporting. The system does not require on-site measurement. Any sample contamination by tampering etc. is readily detected.

The DS100 incorporates a square section mounting pole that is typically attached to the ground using drive-in fence post supports such as Metposts. Where underlying services are an issue alternative attachments are possible in which bolt-down supports are attached to concrete slabs. Mounting posts can also be easily attached to walls, site hoardings or fence posts using cable ties or screws/bolts.



DS100 installations near an aggregate processing plant (left) and in an urban construction site setting (right)

