

Casella Adapters for use with the Microdust Pro Real Time Dust Monitor

Introduction

The Casella Microdust Pro Real Time Dust Monitor can be used for detailed walk through surveys to establish areas that may be at risk as far as high levels of particle concentrations are concerned. The system uses an optical sensor and the forward scattering of an infrared light beam to measure the concentration of particulates in the measurement chamber. This normally relies on the natural movement of air to pass through the optical cavity as the user moves the unit. If an adapter is used at the same time as the recording made by the Microdust Pro then concentrations from the gravimetric filter and the real time measurement can be correlated.



Microdust Pro RDM with gravimetric dust adapter and pump (any pump can be used)

Operation

In fixed monitoring situations there may not be enough natural movement of air through the optical chamber so the Casella Aspirated Adapter can be used to draw a supply of contaminated air past the optical sensor. The Aspirated adapter is a mains powered unit that uses a small fan to draw the air through the cavity.

The contaminated air can also be drawn past the optics using a suitable personal sampling pump and a general-purpose gravimetric adapter. A range of adapters is available from Casella CEL to cover gravimetric, respirable, aspirated and size-selective applications required by the relevant regulations.

Applications and Use



Aspirated adapter fitted onto Microdust Pro probe



Size selective dust adapter with PUF filters



Respirable adapter fitted to Microdust Pro probe

Ordering information

103187B	Aspirated adapter complete with 110 V power adapter unit
103214B	Gravimetric dust adapter
103182B	Respirable dust adapter
151280B	Size selective adapter using PUF filters
P118204	Polyurethane foam (PUF) filters available for PM _{2.5} measurements (10 per pack)
P118206	Polyurethane foam (PUF) filters available for PM ₁₀ measurements (10 per pack)
P118208	PUF filters respirable fraction measurements (4 microns) (10 per pack)