



# DATA SHEET

## PMB 4000

***12V DC Battery Operated***

***Lightweight & Fully Portable***

***Easy To Use***

***Stainless Steel Construction***

***Average of 12 Hours Battery  
Operating Time***

***Wide Operating Temperature  
Range***

***Sample Port***

***Operates At High Pressures***



Cardev International Ltd

Ripon Way, Harrogate, HG1 2AU  
Tel: 01423 522911 Fax: 01423 530043  
Email: sales@cardev.co.uk or visit our  
website at: www.cardev.co.uk



**PMB 4000**

# **PMB 4000** **PARTICLE MONITOR**



## **INTRODUCTION**

The particle monitor is a self contained, battery operated instrument housed in a rugged stainless steel enclosure. All of the accessories required for normal operation are contained within a detachable storage tray. The instrument is designed for use with the CARDEV standard OSCAR range of filtration units and other hydraulic systems fitted with sampling points.

## **DESCRIPTION**

The particle monitor operates on the principle of light extinction to detect particles passing through an optical cell. The photo detector, which is situated on one side of the cell, detects light generated by a laser diode, situated on the opposite side of the cell. An LED display is incorporated to give direct readings of oil contamination and operating parameters of the instrument.

The instrument is powered by means of a 12v rechargeable battery. The battery is contained within the stainless steel enclosure together with a fuse. The normal continuous operating time before recharging is required is 12 hours. An on-off switch and battery charging socket are also provided. The battery charger which is fully automatic, operates from a 230v ac mains supply. A detachable fibre optic lead and connector is provided to enable data to be down-loaded to a personal computer.

## **OPERATION**

Connect the monitor IN and OUT ports to the OSCAR filtration unit sampling ports by means of the micro-bore hoses provided. The port marked IN should be connected to the outlet sampling port of the filtration unit, which is colour coded red, while the port marked OUT should be connected to the return sampling port on the filtration unit which is colour coded yellow.

Start the OSCAR filtration unit and turn the particle monitor switch to the ON position. After a period of approximately 2 minutes, the digital display will show meaningful values, which are selected by pressing the appropriate SCROLL DOWN button.