# Integrated Particulate Monitor (IPMTM)

# Fuel Particle Contaminant Analyzer for Fixed Installation

#### DESCRIPTION

Parker Velcon IPM™ Series represents the most up-to-date technology in solid particle contamination analysis. The IPM is a compact, permanently-mounted laser-based particle detector module that provides a cost-effective solution to fluid management and contamination control.

The IPM-200 Series measures particle contamination continuously utilizing the Parker icountPD (iPD) technology, updates the display, and outputs ISO code values to an RS-232, CAN bus, or Cellular Data Acquisition Module.

The IPM-100 Series are design for integration into existing control systems.

The laser based, leading-edge technology is a cost effective market solution to fluid management and contamination control.

- Cellular Telemetry/RS-232
- Reporting interval through visual display

#### PRINCIPLE OF OPERATION

The IPM measures particle contamination continuously updates the display, output options and limit relay every second, and does not perform a "one-off" test. This means that even if the Measurement Period is set to 60 seconds, the display, output and limit relay all report the presence of dirt in the oil in just a few seconds—it does not wait until the end of the Measurement Period before reporting the result.

The IPM has just one setting to control the accuracy, stability and sensitivity of the measurements and that is the "Measurement Period." This can be set from five seconds to 180 seconds. The longer the Measurement Period, the

more contaminant is measured, averaging out any spikes seen on a smaller sample. The shorter the Measurement Period the more sensitive the IPM is to variation of contaminant level, but also the performance on clean systems can be reduced. Thus, the user can select how sensitive the IPM is to spikes of contaminant, and how quickly it responds to contamination levels above the set point ("limits").

The Measurement Period is factory set to 60 seconds, updated on a second by second basis, giving an effectively continuous readout of the level of contamination.

#### **BENEFITS**

- Independent online monitoring of system contamination trends
- Cost effective solution in monitoring fuel cleanliness and reducing machine downtime
- LCD display with alarm output warnings (IPM-200 Series)
- Continuous performance for dependable analysis
- Diesel, kerosene fuel compatible construction
- Self-diagnostic software
- CANBUS/RS-232 output to customer supplied control systems





IPM-230

#### **MODELS AVAILABLE**

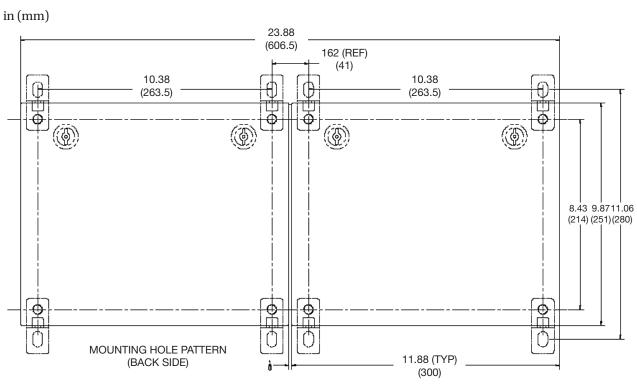
MODEL	110	110-FR	120	120-FR	210	220	230
<b>Cust Power Control</b>	Х	Х	Х	Х	NA	NA	NA
MD-3	NA	NA	NA	NA	Х	Х	Х
CANBus/RS-232	Х	Х	NA	NA	Х	NA	Х
MODBus/RS-232	NA	NA	Х	Х	NA	Х	NA
Telemetery/RS-232	NA	NA	NA	NA	NA	NA	Х
Timer	NA	NA	NA	NA	Х	Х	Х
Pump	Х	NA	Х	NA	Х	Х	Х
Flow Regulator	NA	Х	NA	Х	-	-	-
Data Storage	NA	NA	NA	NA	Х	Х	Х
CE Mark	Х	Х	Х	Х	-	-	-

## **IPM-200 SERIES STANDARD COMPONENTS**



Qty.	Description
1	IPM-200 Series Unit Enclosure
1	Installation and Operation Manual
1	Software, OEM, CD's
1	Sampling Hose Set, 5 m long, P/N ACC6NN005
1	Probe, Twin Sample Port, P/N ACC6NN046
1	Mounting Hardware
1	Enclosure Lid Key

### **DIMENSION**



### **IPM-100 SERIES STANDARD COMPONENTS**



Ohr	Description
Qty.	Description
1	IPM-100 Series Unit Enclosure
1	Installation and Operation Manual
1	Sampling Hose Set, 5 m long, P/N ACC6NN005
1	Probe, Twin Sample Port, P/N ACC6NN046
1	Mounting Hardware
1	Enclosure Lid Key

### **DIMENSION**

in (mm)

