

# icountACM20 Z2

ATEX Approved Portable Particle Counter



## For use in explosive and hazardous areas

icountACM20 Z2 is designed to be used to monitor various fuels from existing sampling points in hazardous locations such as refineries, pipelines, distribution terminals, airport fuel supply systems all the way through to the point of uplift into aircraft. With Zone 2 classification, the icount ACM20 Z2 is the worlds **only** ATEX approved particle counter.



## Contact Information:

Parker Hannifin  
**Hydraulic Filter Division Europe**

**European Product Information Centre**  
**Freephone: 00800 27 27 5374**  
**(from AT, BE, CH, CZ, DE, EE, ES, FI, FR, IE, IT, PT, SE, SK, UK)**  
**filtrationinfo@parker.com**

[www.parker.com/hfde](http://www.parker.com/hfde)

## Product Features:

- Assembled in an approved and certified stainless steel enclosure to comply with ATEX Directive 94/9/EC.
- Can be used in explosive and hazardous areas, including offshore and mining applications.
- ATEX Zone II
- Certified to CE Ex II 3 G Ex nR/nL IIC T6
- "A" Class product defined for the Aviation market.
- ATEX approved Handset and keypad.
- Suitable for use with mineral oil and petroleum based fluid as per ACM20/LCM20 particle counters.

# icountACM20 Z2

## ATEX Approved Portable Particle Counter

### Features & Benefits

**Test Time:**

2 minutes.

**Repeat Test Time:**

Every 2 minutes (Manual testing) Every 6 minutes (Automatic).

**Principle of Operation:**

Optical scanning analysis and measurement of actual particles and inference to water presence.

**Primary Output:**

$\geq 4\mu(c)$ ,  $\geq 6\mu(c)$ ,  $\geq 14\mu(c)$ ,  $\geq 21\mu(c)$ ,  $\geq 25\mu(c)$ ,  $\geq 30\mu(c)$  counts per ml.

**Secondary Diagnostic Output:**

% Volume Distribution, via graphical display on handset.

**International codes:**

ISO 7-22 in accordance with ISO 4406-1999

**Data entry:**

32 character two line dot matrix LCD. Full alpha numeric entry facility on keypad.

**Data retrieval:**

Memory access gives test search facility for up to 300 saved tests.

**Calibration:**

In accordance with Parker Calibration Procedure CM20-N, which complies to ISO11171:1999, Clause 6 (Omitting Annex F).

**Re-calibration:**

Every 12 months by a dedicated Parker Service Centre (Consult Parker).

**Max. working pressure:**

420 bar.

**Operating Temperature:**

+5°C to +80°C

**Memory store:**

300 test (scrolling memory) capacity.

**Computer compatibility:**

Interface via RS 232 connection @ 9600 baud rate.

**Portability:**

15 kg. ACM20 has its own battery pack and carry case with wheels.

**Power requirement:**

Rechargeable battery powered or via the 12vDC input.

**System connection:**

Via Millipore adaptor with flow restriction through supplied needle valve.

**Certification:**

Complies with all relevant EC declarations of conformity.

**Printer facility:**

No printer. Data download only.

### Online Commission Kit

- a – icountACM20 Zone II Particle Counter
- b – Battery Charger
- c – Process Cable
- d – User Manual
- e – Downloader Software
- f – Throttle Kit
- g – Millipore Adaptor Assembly
- h – Aluminium Case
- i – Bottle Assembly



## Specification

### Construction:

**Unit:** Stainless Steel

**Carrying case:** ABS

**Hand-held display:** ABS

**Keypad:** polyester membrane

### Mechanical components:

Brass, plated steel, stainless steel and aluminium

**Seals:** Fluorocarbon

**Hoses:** Nylon (Kevlar braided microbore)

### Fluid compatibility:

All fuels. For other fluids consult Parker

### Internal rechargeable battery:

Note: ONLY to be charged outside of the hazardous area, with the unit switched off

### Fuse:

1.25A fast blow fuse included for overload protection

Return to Parker Hannifin if fuse is blown

### icountACM20 2032 technology:

Unique optical scanning system

## Using icountACM20 Z2

icountACM20 Z2 is designed to be used to monitor various fuels from existing sampling points in hazardous locations from refineries, pipelines, distribution terminals, airport fuel supply systems all the way through to the point of uplift into aircraft. With Zone II classification, the icountACM20 Z2 is the worlds **only** ATEX approved particle counter.



## Applications in Fuels

- **Oil Refinery**
  - To count and verify the levels of dispersed contamination in accordance with specification limits. (Consult Parker CMC).
- **Distribution Terminals/Hubs**
  - For use on receipt and outbound supply. Also to provide filtration performance, tank cleanliness and product quality checks.
- **Storage**
  - Settling times can be reduced by monitoring with the ACM by ensuring that levels of dispersed contamination are below acceptable levels.
- **Airport Fuel Farm**
  - Monitoring of fuels into storage, through the fuel farm, hydrant system and during uplift into wing.
- **Pipeline Commissioning**
  - Fast real time monitoring of pipelines following pigging and cleaning processes.
- **Oil and Gas Platforms**
  - Used to monitor the filtration performance, system cleanliness and quality of delivered product.

