

# PARTICLE COUNTER **PC3400**

#### STANDARD FEATURES

- Detection 2-900 microns, Sizing 2-100 microns
- Up to 8 user programmable size channels
- Reports raw counts, cnts/mL, or cnts/100mL
- User friendly, menu driven calibration
- User keypad for complete system setup
- MODBUS RTU communication
- Sensor laser & cell condition readout (0-100%)
- External sensor with sapphire optics

### **OPTIONAL FEATURES**

- TracWare (MB) software record data
- Analog Output Board (4-20mA signals)
- Multiple communication protocols supported



#### **BENEFITS**

- Provides particle size and quantity information and detects particulate down to low ppt levels
- User friendly calibration routine makes calibrations fast, simple, and lowers maintenance cost because units don't need to go back to factory for routine calibration
- User keypad with extensive menu functions eliminates requirement to use external software for setup
- Large display shows all 8 particle size channels at once, plus other sensor performance info
- External sensor with large flow cell is less prone to plug, easy to clean, and water is kept away from electronics

#### **APPLICATIONS**

Water Treatment
Wastewater Treatment
Reverse Osmosis Pretreatment
Membrane Filtration

Boiler/Condensate Parts Washing Food & Beverage Pharmaceutical

#### DESCRIPTION

The PC3400 sets the newest standard in its class for online particle counting in the water treatment industry. The high performance ARM7 32-bit microprocessor runs advanced embedded applications which significantly reduce dependency on external software and allows the operator to perform all setup functions from the keypad. The PC3400 boasts a large graphical display which allows the user to see all the particle count information for all size ranges at one glance. The most powerful and cost saving feature is the PC3400's user friendly calibration. To calibrate the unit, simply access the calibration menu through the keypad, pass a solution of calibration standard through the sensor and the unit will automatically adjust the calibration threshold for accurate sizing. Complicated, proprietary software running on a computer is no longer needed to perform calibration! Never has particle counting been this easy.

Particle Detection

Chemtrac Systems, Inc. 6991 Peachtree Industrial Boulevard, Building 600 Norcross, GA 30092 USA

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#### **GENERAL SPECIFICATIONS**

Laser Type: Solid-state laser diode (780 nm)

Flow Cell Dimensions: 1mm x 1mm

Cell Material: Nituff Coated Aluminum

PEEK Plastic (optional)

Viewing Windows: Sapphire

**Detection Range:** 2-900 microns

Sizing Range: 2-100 microns

100 mL/min. Flow Rate:

Resolution: Better than 10% at 10 micron

(ASTM-F658)

Coincidence: <10% at 15,000 cnts/mL (2 micron)

Size Channels: 8, user-selectable

Laser Diode Life: MTBF 75,000 hours @ 55° C

Measurement Type: Volumetric, counts/mL

Local Display: Graphical, 8 size channels displayed

at once, unit info/diagnostic screen,

user menus

Display Readout: Size channel, counts, cell condition (0-

100%), laser condition (0-100%, unit address, sample period, sample

frequency, flow rate

Serial Communications: 2 wire RS485 (Network) and

RS232 (Local)

Standard: MODBUS RTU (RS485) Communication Protocols:

> Optional: multiple communication protocols supported (contact for details)

Analog Outputs: 4 channels, 4-20 mA (optional)

Power Requirements: 100-240 VAC, 1A, 47 - 63 Hz

32° - 130° F (0° - 55° C) Operating Temperature:

12" W x 11" H x 5" D Dimensions:

(305 mm W x 280 mm H x 127 mm D)

Weight: 7 lbs (3.2 kg)

## PC3400 and Weir set-up

