Knowledge Beyond Measure.

OmniCount™ Portable Water-Based Condensation Particle Counter

Models 3001 and 3002

Water-based, Orientation Independent, Portable, Versatile

When you need accurate ultrafine particle (UFP) / nano-particle counts and concentration measurements, both OmniCount™ Portable Water-based Condensation Particle Counters provide versatile, portable, and cost-effective solutions.

Built for real-world use, both OmniCount™ PWCPCs maintain measurement accuracy during movement and tilting and operate for more than four hours on battery power, making them suitable for both mobile and stationary applications where power may be limited. Bluetooth® LE connectivity enables seamless, wireless data monitoring for efficient workplace and field application, and lab workflows.

By using distilled water instead of butanol or isopropyl alcohol, the OmniCount™ models simplify operation, reduce consumable costs, and improve safety and sustainability. This makes them cost-effective and affordable solutions that require minimal training, making them ideal for all monitoring applications, teaching laboratories, and expanding research teams seeking reliable UFP and nano particle measurements in a lightweight, easy-to-use instrument.

The dual-channel model 3002 allows simultaneous comparison of UFP concentrations in two nearby environments, making it ideal for applications like real-time respirator fit assessment in workplace or, Simulated Workplace Protection Factor Studies (WPFs/SWPFs), indoor/outdoor air quality assessments and more.

Features and Benefits

- Single channel (3001), or dual-channel (3002)
- Lightweight, wearable/portable and battery-operated
- Detects particles ranging from <10-1,000 nm
- >4 hr battery operation (at 20 °C / 68 °F) and plug-in power options for flexibility
- Hot-swappable battery
- Easy data management with Bluetooth® LE and USB-C, on-board data storage with three different operation modes, PC software for data collection, access and export
- Suitable for various particle concentration levels (up to 200,000 particles/cm³)
- Cost-effective and environmentally friendly, uses distilled water, each CPC samples at 0.1 L/min
- Integrates seamlessly with the OmniTrak™ platform for multi-location and multi-parameter monitoring

Applications

- Personal exposure monitoring
- Indoor and outdoor mobile monitoring
- Field and remote measurement campaigns
- Indoor air quality investigations
- Work area monitoring
- Point source location
- Cabin air quality investigations
- Academic research and teaching

Additional applications (model 3002 only):

- Fit assurance testing for respirators
- Filtration performance testing
- HVAC evaluation

Specifications

OmniCount™ Portable Water-Based Condensation Particle Counter

Models 3001 and 3002

Number of Channels
1 (3001) or 2 (3002)

Sample Flow Rate
0.1 L/min (each channel)

Particle Size Detection (D_{50})
<10 nm

Particle Size Range
10-1000nm

Concentration Range:
0 to 200,000 #/cm^3

Concentration Accuracy*
±20%

Channel to Channel Agreement
±15% (wicks at equivalent saturation states)

Zero Count Performance
<0.01 #/cc, for $T_{Mod} < T_{Sample\ Dew}$, ~75% RH

Response Time
$t_{10\text{-}90}$ <2s

Environmental Operating Conditions
8-38°C (46-100°F)
75-105 kPa / 0.75-1.05 bar / 10.9-15.2 psi
0-90% RH (non-condensing)

Wick Life
Typically > 8 h, but dependent on sample RH

Battery Life
>4 hours at 20°C (68°F)

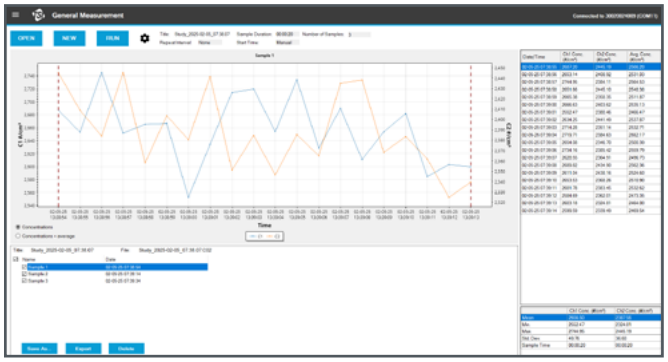
Data Storage Capacity

Mode / Model	3001	3002
Standard Mode	29 hours	24 hours
Fit Test Mode	N/A	19 hours
High Frequency Mode	20 hours	11 hours

Weight
3001: 0.85 kg (1.87 lbs)
3002: 1 kg (2.2 lbs)

Dimensions
16 cm x 12 cm x 8 cm (6.6 in. x 4.7 in. x 3.1 in.)

*At 25°C, with fully saturated wicks. Absolute accuracy decreases with two or more of the following occurring simultaneously: partially saturated wicks, elevated temperatures, and elevated concentrations, as indicated by pulse ratio status.



TSI® OmniCount™ Software

Bluetooth® LE Module Specifications for Taiwan Compliance:

RF Module Brand Name	u-blox
RF Module Model	NINA-B306
RF Frequency Range	2400-2480 MHz
RF Band	2.4 GHz, 40 channels
NCC ID	CCAI19LP1670T0

To Order

Specify	Description
3001	Single-channel **OmniCount™** Portable Water-based Condensation Particle Counter (PWCPC)
3002	Dual-channel **OmniCount™** Portable Water-based Condensation Particle Counter (PWCPC)
300X-WICKKIT	Set of two replacement wicks
3002-BATTERY	Spare battery pack
3002BATTCHARGER	2 port external battery charger

Specifications are subject to change without notice.

kenelec scientific

Distributed by:
Kenelec Scientific Pty Ltd
1300 73 22 33
sales@kenelec.com.au
www.kenelec.com.au

Knowledge Beyond Measure.

TSI Incorporated - Visit our website **www.tsi.com** for more information.

USA	Tel: +1 800 874 2811	**India**	Tel: +91 80 67877200
UK	Tel: +44 149 4 459200	**China**	Tel: +86 10 8219 7688
France	Tel: +33 1 41 19 21 99	**Singapore**	Tel: +65 6595 6388
Germany	Tel: +49 241 523030		

P/N 5003269 (A4) Rev F Printed in U.S.A.

MAR-2448