



® Knowledge Beyond Measure.

OmniCount™ Portable Water-Based Condensation Particle Counter

Models 3001 & 3002



Measure More, Even in Motion Water-based, Orientation Independent, Portable, Versatile

For aerosol researchers, environmental and health professionals seeking accurate ultrafine particle (UFP) 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™** PWPCs maintain measurement accuracy during jostling 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 field 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 routine monitoring, teaching laboratories, and expanding research teams seeking reliable UFP measurements in a lightweight, easy-to-use instrument.

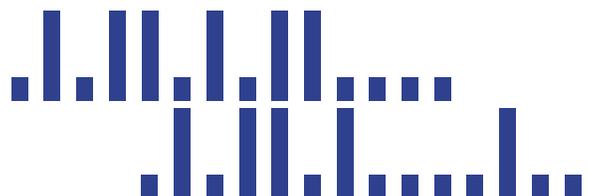
The dual-channel model 3002 allows simultaneous comparison of UFP concentrations in two nearby environments, making it ideal for applications like real-time personal protective equipment (PPE) fit assessment, indoor/outdoor air quality assessments, and more.

Features and Benefits

- Single channel (3001), or dual-channel (3002) for simultaneous measurements from different locations or inputs
- Lightweight and portable, ideal for fieldwork
- Detects particles ranging from <10-1,000 nm
- >4 hr battery operation (at 20°C) 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

Applications

- Personal and mobile UFP monitoring
- Outdoor and ambient monitoring
- Field and remote measurement campaigns
- Indoor air quality investigations
- Occupational health and safety
- Academic research and teaching
- For 3002:
 - Real-time personal protective equipment assessment
 - Filtration efficiency measurement



Specifications

OmniCount™ Portable Water-Based Condensation Particle Counter

Model 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

Concentration Range:

0 to 200,000 #/cm³

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_{10-90} <2s

Environmental Operating Conditions

8-38°C

75-105 kPa

0-90% RH (non-condensing)

Wick Life

Typically > 8 h, but dependent on sample RH

Battery Life

>4 hours at 20°C

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.)

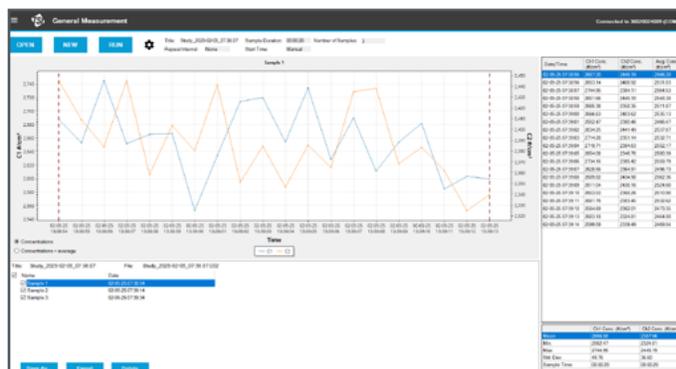
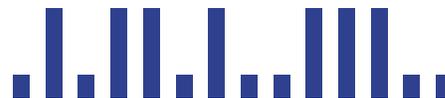
*At 25°C, with fully saturated wicks. Absolute accuracy decreases with two or more of the following occurring simultaneously: partially saturated wicks, elevated temperatures, and elevated concentrations, as indicated by pulse ratio status.



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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	CCA19LP1670T0

To Order

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

Specifications are subject to change without notice.

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