

TES 5110/TES 5200

Particle Counter

Particle Mass Counter



APPLICATIONS:

- ☐ Monitoring Cleanrooms
- ☐ Controlled Environments
- ☐ Indoor Air Quality
- ☐ Hospitals & Clinics
- ☐ Process Control
- ☐ HVAC Applications
- ☐ Filter Testing
- ☐ Mining & Ore Processing
- ☐ Emission Sourcing
- ☐ Monitoring Growing Rooms

FEATURE:

- ☐ Particle mass & particle counter in a single handheld unit. (5200)
- ☐ Six mass ranges and eight particle sizes. (5200)
- ☐ User K-factors setting for special particulate with different densities. (5200)
- ☐ Six particle sizes. (5110)
- ☐ Integrated temperature/humidity sensor (no need for external add-on).
- ☐ Flow rate 2.83 L/minute (0.1 CF/minute).
- ☐ Rechargeable battery provides up to 4 hours of continuous operation (charge time 2 hours).
- ☐ Buffer function allows storing and redisplay of up to 500 measurement data sets.
- ☐ SD storage device.

SPECIFICATIONS

Optical system	Sideway light-scattering method
Light source	Laser diode
Laser product class	Class 1, IEC 60825-1 / EN 60825-1
Mass: (5200)	
Mass concentration ranges	PM1, PM2.5, PM4, PM7, PM10, and TSP
Concentration range	0 to 1000 $\mu\text{g}/\text{m}^3$
Sample time	1 minute (2.83 L / min)
Particle: (5110 & 5200)	
Particle size 6 channels (5110)	0.3 μm , 0.5 μm , 1.0 μm , 2.0 μm , 5.0 μm , 10 μm
8 channels (5200)	0.5 μm , 0.7 μm , 1.0 μm , 2.5 μm , 4.0 μm , 5.0 μm , 7.0 μm , 10 μm
Counting Efficiency	50% @0.3 μm ; 100% for particles > 0.45 μm (per JIS B9921:1997)
Sample flow rate	2.83 L / min
Maximum particle concentration	105,900 particles / L (coincidence loss max. 5%)
Measurement time	6 s. (0.01CF), 21 s. (1L), 1 min. (0.1 CF, 2.83L), 3 min. 32 s (10L), 10 min. (1 CF, 28.3L), any length (MANUAL), any length (1 s. to 59 min. 59 s.)
Relative Humidity	$\pm 7\%$, 20% to 90% non-condensing
Temperature	$\pm 3^\circ\text{C}$, 10°C to 40°C (50°F to 104°F)
Buffer function	Store and recall values for up to 500 measurements
PC interface	USB interface
Temperature / humidity measurable range	10°C to 40°C , 20% to 90%RH (approximate)
Power requirements	Built-in battery or AC adapter
Battery	Rechargeable Lithium-ion (Li-ion) battery. Charged from supplied AC adapter when power is ON (charge time 2 hours).
AC adapter	Output voltage : DC12V, 3A
Dimensions and weight	212(L) x 120(W) x 60(H)mm / Approx. 930g
Supplied Accessories	Users manual, AC adapter, USB connector, Carrying case.

