

Outlines

Models	MEXA-2000SPCS	MEXA-2100SPCS	MEXA-2200SPCS	MEXA-2300SPCS
Conformed standards	UN/ECE Regulation No. 83 (Rev. 3, Amend. 2) UN/ECE draft Regulation No. 49 ¹ (ECE/TRANS/WP. 29/GRPE/2010/7), to be updated	—	UN/ECE Regulation No. 83 (Rev. 3, Amend. 2) UN/ECE draft Regulation No. 49 (ECE/TRANS/WP. 29/GRPE/2010/7), to be updated	— ²
Measuring principle	Laser scattering condensation particle counting (CPC)			
Lower particle size limit	Counting efficiency of 23 nm particles: 50 % ± 12 %, Counting efficiency of 41 nm particles: 90 % or more			
Measuring components and range	Number concentration of solid particles; 0 – 10000 up to 0 – 50000 particles/cm ³ (after internal dilution) ³			
Sample handling temperature	47 °C ± 5 °C (Dilute sampling)	Maximum permissible temperature (Direct sampling) 350 °C ⁴	47 °C ± 5 °C (Dilute sampling)	Maximum permissible temperature (Direct sampling) 350 °C ⁴
Diluted sample temperature	Primary diluter (PND1): 191 °C ± 10 °C Evaporation tube (ET): 350 °C ± 10 °C Secondary diluter (PND2): 35 °C or less	Pre-classifier: 47 °C ± 5 °C Primary diluter (PND1): 191 °C ± 10 °C Evaporation tube (ET): 350 °C ± 10 °C Secondary diluter (PND2): 35 °C or less	Primary diluter (PND1): 191 °C ± 10 °C Evaporation tube (ET): 350 °C ± 10 °C Secondary diluter (PND2): 35 °C or less	Pre-classifier: 47 °C ± 5 °C Primary diluter (PND1): 191 °C ± 10 °C Evaporation tube (ET): 350 °C ± 10 °C Secondary diluter (PND2): 35 °C or less
Dilution factors in diluters	Primary diluter (PND1): 10 to 200 ³ Secondary diluter (PND2): 15	Diluter in DSU: 10 Primary diluter (PND1): 10 to 200 ³ Secondary diluter (PND2): 15	Primary diluter (PND1): 10 to 200 ³ Secondary diluter (PND2): 15	Diluter in DSU: 10 Primary diluter (PND1): 10 to 200 ³ Secondary diluter (PND2): 15
PCRF	0.95 < fr(30 nm) / fr(100 nm) < 1.3, 0.95 < fr(50 nm) / fr(100 nm) < 1.2			
Volatile particle removal efficiency	99% or more, for C ₄₀ (30 nm of particle size, and 10000 particles/cm ³ or more)			
Accuracy of dilution factor	Within ± 10 % of nominal dilution factor setting (for VPR total dilution factor of 150 to 3000, gas based)			
Operating environment	Without CLU (standard): Ambient temperature: 5 °C to 30 °C, Ambient humidity: 80 % or less as relative humidity With CLU (optional): Ambient temperature: 5 °C to 45 °C, Ambient humidity: 80 % or less as relative humidity			
Power supply voltage and frequency	200/220/230/240 V AC (±10 %, max. 250 V), 50/60Hz (±1.0 Hz), single phase (to be specified at ordering)			
Power requirements	Main unit: Max. 2.3 kVA Main unit and all optional units: Max. 4.5 kVA	Main unit: Max. 2.5 kVA Main unit and all optional units: Max. 4.4 kVA	Main unit: Max. 2.4 kVA Main unit and all optional units: Max. 4.3 kVA	Main unit: Max. 2.6 kVA Main unit and all optional units: Max. 4.5 kVA
Dimensions (excluding any projections)/Mass				
Main unit (without transfer tube, control unit and optional units)	434(W)×731(D)×600(H) mm Approx. 115 kg	434(W)×845(D)×600(H) mm Approx. 120 kg	434(W)×910(D)×600(H) mm Approx. 140kg	434(W)×910(D)×600(H) mm Approx. 145 kg
Optional units ⁵	CYU: Approx. 290(W)×146(D)× 236(H) mm Approx. 4 kg SRU: Approx. 300(W)×550(D)× 450(H) mm Approx. 35 kg CLU: Approx. 570(W)×850(D)×1190(H) mm Approx. 80 kg (for CLU and optional cabinet) DFC: Approx. 464(W)×550(D)× 320(H) mm Approx. 38 kg LCU: Approx. 350(W)×690(D)× 670(H) mm Approx. 35 kg VGU: Approx. 550(W)×300(D)× 450(H) mm Approx. 20 kg			

*1: Only for full flow tunnel.

*2: MEXA-2300SPCS can be used in the measurement method according to the regulation. For detailed information, please contact HORIBA.

*3: Dilution factor of the system should be determined so that the particle concentration after dilution fits into the measuring range.

*4: Allowable range of gas temperature at sample probe inlet depends on the sampling condition, because it is limited as the temperature of diluter in DSU (350 °C or less). For detailed information, please contact HORIBA.

*5: The dimensions depend on customers.

HORIBA continues contributing to the preservation of the global environment through analysis and measuring technology.



Please read the operation manual before using this product to assure safe and proper handling of the product.

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