

## Specifications

Model	ENDA-5000					
Component	NOx	SO <sub>2</sub>	CO	CO <sub>2</sub>	O <sub>2</sub> <sup>1)</sup>	
Measurement methods	NDIR	NDIR	NDIR	NDIR	Magneto-pneumatic detection	
Range <sup>2)</sup>	Standard	200~5000 ppm	200~5000 ppm	200~5000 ppm	5~25 vol%	10~25 vol%
	Optional	100 ppm~	50 ppm~	100 ppm~	—	—
Range Ratio	Within a factor of 10	Within a factor of 10	Within a factor of 10	Within a factor of 5	Within a factor of 2.5	Within a factor of 2.5
Repeatability	Within 0.5% of full scale (with optional range, or during O <sub>2</sub> measurement, 1.0% of full scale)					
Linearity (indicator error)	1.0% of full scale					
Zero drift	= 1.0% of full scale (assuming surrounding temperature is maintained within 5°C) (with optional range, or O <sub>2</sub> measurement, 2.0% of full scale)					
Span drift	2.0% of full scale/week (assuming surrounding temperature is maintained within 5°)					
Response time <sup>3)</sup>	Within 60 seconds (T <sub>d</sub> + T <sub>90</sub> from equipment intake area) (sample flow 0.6 L/min.) (within 240 seconds for SO <sub>2</sub> only)					
Overall interference from co-existing gases	= 2.0% of full scale/week (within standard range, with standard gas formation)					
Display	Touch panel LCD (backlight) (four usable lines)					
Environment Condition	Temperature	-5 to 40° C (away from direct sunlight and radiation heat) <sup>4)</sup>				
	Humidity	85% or less (no condensation)				
	Vibration	100 Hz, 0.3 m/S <sup>2</sup> or less				
	Dust	Standard environment or better				
Measuring Gas Condition	Temperature	250°C or lower				
	Dust	0.1 g/Nm <sup>3</sup> or less				
Standard gas composition <sup>5)</sup>	NO: 500 ppm or less; NO <sub>2</sub> : 6 ppm or less; SO <sub>2</sub> : 1000 ppm or less; SO <sub>3</sub> : 50 ppm or less; CO: 200 ppm or less; CO <sub>2</sub> : 15% volume or less; H <sub>2</sub> O: 40% volume or less					
Sampling method	Dry sampling using an electric cooler					
Sample gas flow	2.5 L/min~3.0 L/min					
Sample inlet tube	Teflon tubing (ø8/ø6 mm)					
Sample gas pressure	4.9 kPa (three points selected) (with no sample gas back pressure)		(1) -1.96 to 4.9 kPa (2) - 3.43 kPa (3) -4.9 to 1.96 kPa			
	Pressure control uses a regulator and cylinder; Reduced pressure sampling; Control pressure: -4.9 kPa					
	Output DC 4 to 20 mA (absolute output) (DC 0 to 16 mA/DC 0 to 1 V/DC 1 to 5V optional) Max. 12 output systems					
External output	Analysis alerts, analysis warnings, range display, corrections, conservation, purging (option) Contact capacity: DC 30 V 1 A, AC 250 V 1 A resistance load					
Correction method	Dry correction, automatic correction (correction cycle: 7 days standard, can be adjusted to between 1 and 99 days), manual correction					
Calibration gas	Zero gas	With measurement method authorization: N <sub>2</sub> When there is no measurement method authorization: N <sub>2</sub> or ambient air				
	O <sub>2</sub> carrier gas	Ambient air				
	Span gas	Gas cylinder for each component measured (when there is no measurement method authorization: O <sub>2</sub> or ambient air can be used)				
Probe	Flange: JIS 10K, 40 A/F; Sample probe tube length: 1000 mm; Material: SUS-316 stainless steel;					
Primary filter	Filter element: SUS-304 stainless steel and 2. m-pleated quartz wool; Electric heater: 100 VA, with water droplet proof case					
Power supply	AC 100 V 15 V(85 V~115 V)					
Power frequency	50/60 Hz (switchable)					
Power consumption	About 800 VA (heated piping 30m: +1100 VA; heater in tray: +300 VA)					
Exterior dimensions /Mass	600 (W) x 1770 (H) x 300 (D) mm (high pressure gas cylinders, 3.4 L cylinders, maximum of 3 cylinders); About 180 kg (not including cylinders)					
	600 (W) x 1770 (H) x 300 (D) mm (high pressure gas cylinders, 3.4 L cylinders, maximum of 3 cylinders); About 200 kg (not including cylinders)					
Materials in contact with sample gas	SUS-316 stainless steel, SUS-304 stainless steel, Teflon, polypropylene, polyethylene, fluororubber, PVC, PVDF, and glass					
Enclosure	Independent outdoor installation Plate thickness: Main unit, doors, top plate, steel plate: 2.3 mm; Channel base: 3.2 mm; Doors front opening; Interface: right front					
Color/Finish	Semi-gloss Munsell 5Y7/1 on all inner and outer surfaces					

1-1: No carrier gas cylinder is required.

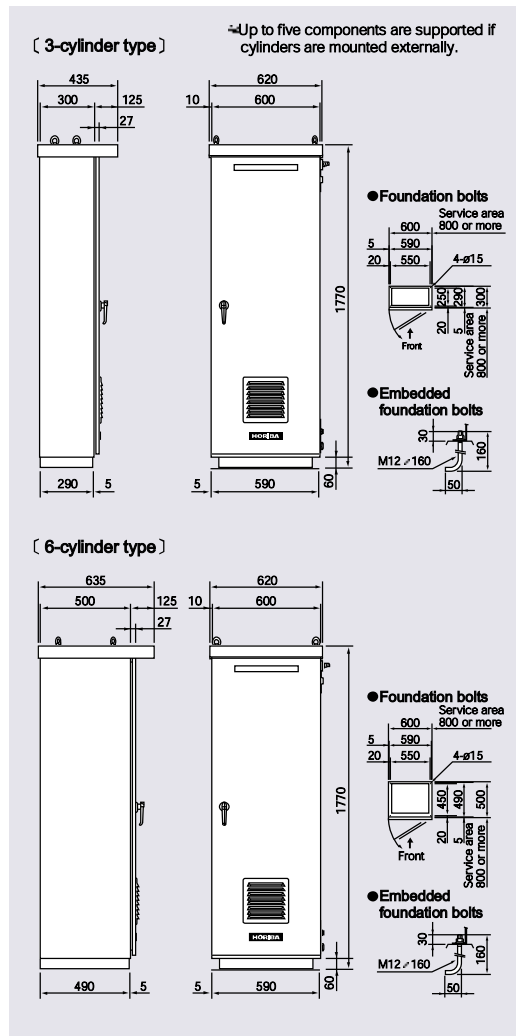
2-2: Up to two ranges are supported for each component.

3-3: Response time may vary depending on the sampling system composition.

4-4: Support is available for -15 to 40 C (cold-climate version) and 5 to 50 C.

4-5: An NH<sub>3</sub> scrubber is available as an option for cases where a combined gas includes NH<sub>3</sub>. SO<sub>2</sub> measurement corrected for CH<sub>4</sub> interference is available for cases where there is CH<sub>4</sub> in the sample gas for SO<sub>2</sub> measurement. CO measurement corrected for N<sub>2</sub>O interference is available for cases where there is N<sub>2</sub>O in the sample gas for CO measurement.

## Dimensions (unit: mm)



The EMC Directive: EN55325 Compliant



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

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