

Flue gas analyzer

HT-1300X



O₂

0 ~ 20.9 vol%

CO

H₂ Compensation

0 ~ 10000ppm

°C

0 ~ 650°C



H2 Compensation as standard function

More accurate CO measurement by mean of H2 compensation function.

3.1 inch Large, backlit, graphic LCD

with menu guiding line
User selectable 8/4 measured values display.

Weight about 620 g

CO purge pump available

To protect CO sensor from high CO concentration, CO purge pump is available as an optional item.

Pressure measurement

Draft pressure • Differential pressure • Air pressure and Gas pressure measurement is available as an optional item.

Option		
IR Printer HT-1610		Roll paper x 1 AA battery x 4
Printer paper HT-1636		5 rolls
Ambient air temperature sensor HT-2305		0 ~ 100°C For air temperature
ABS case HT-2315		Size 500×420×125mm 2.3kg
Measurement Software for PC Online View 2000 HT-2084		RS232 transfer cable USB cable Recommended OS: Windows 7/8.1/10
Measurement Software for PC Online View 2000 HT-2094		RS232 transfer cable Recommended OS: Windows 7/8.1/10
Bluetooth Module HT-2321	Integrated	For PC measurement software
CO Purge Pump HT-2321	Integrated	For protect CO sensor
Pressure sensor unit HT-2303	Integrated	Pressure • Differential Pressure • Draft pressure
Draft probe HT-1050A		L=180mm φ 5mm Hose length 3000mm
Probe handle HT-7201		Sampling hose length 2700mm
Probe tube HT-7231		L=180mm φ 5mm Flue gas temp. 0 ~ 650°C
Probe tube HT-7235		L=500mm φ 6mm Flue gas temp. 0 ~ 650°C
Probe tube HT-7232		L=750mm φ 6mm Flue gas temp. 0 ~ 650°C
Probe tube HT-7233		L=750mm φ 8mm Flue gas temp. 0 ~ 1100°C

Specification

Measurement items

O ₂	Measurement range Accuracy Resolution Response time	0 ~ 20.9vol% ±0.2vol% 0.1vol% <20sec.
CO (H ₂ Compensation) *1	Measurement range Accuracy Resolution Response time	0 ~ 2000ppm (Max. over load 10000ppm) ±10ppm or ±5% reading (0 ~ 2000ppm) *2 ±10% reading (2001 ~ 10000ppm) 1 ppm <40sec. (0 ~ 2000ppm) < 60sec.(2001 ~ 10000ppm)
Pressure	Measurement range Accuracy Resolution	±100 hPa F.S.±2% 0.01 hPa
Flue gas temp.	Measurement range Accuracy Resolution	0 ~ 650°C 0 ~ 1100°C (depend on probe tube) 0 ~ 100°C: ±2°C 100°C ~ : ±2% reading 0.1°C (0 ~ 999.9°C) 1°C (1000 ~ 1100°C)
Ambient air temp.	Measurement range Accuracy Resolution	0 ~ 100°C ± 2°C 0.1°C

Calculated items *3

CO ₂	0 ~ CO ₂ Max (calculated from O ₂ Value)
O ₂	0 ~ calculated value (User selectable O ₂)
Air ratio	1.00 ~ 9.99
Losses	0 ~ 99.9%
Efficiency	0 ~ 100%
Dew point	0 ~ 100°C
mg/m ³	

Fuel

13A, 6C, LPG, kerosine, Light oil, Banker A, Banker C, Pellet

Sensor

O ₂	Electrochemical sensor
CO (H ₂ Compensation)	Electrochemical sensor
Flue gas temp.	K thermocouple
Ambient air temp.	K thermocouple
Pressure	piezoresistive sensor

Main unit

Temperature	Operation : +0°C ~ +45°C Storage : -20°C ~ +50°C
Display	Dot matrix 8 lines ⇄ 4 lines switchble
Dimension	(W×H×D) 80×210×60 mm
Weight	Approx.620g
Battery	Battery charger (AC100-240V 50/60Hz DC9V 550mA) Rechargeable NiMH battery (Approx. 8 hours continuous working hours)

Standard equipment

Built-in	Pump, interface for PC (RS232), Data logger(up to 100 data), Interface for printer		
Accessory	Battery charger、Sampling probe、reflecting plate、Filter set Condensate trap、Strap、Softcase		
Description		Art.No.	Spec. / remarks
Sampling probe		HT-1000A	L=180mm φ5mm Flue gas temp.0 ~ 650℃ Hose length 1500mm

Option

Sampling probe	HT-1001	L=300mm φ6mm , 0 ~ 650°C , 2700mm
Probe handle	HT-7201	Sampling hose length 2700mm
Probe tube (with flue gas temp. sensor)	HT-7231 HT-7232 HT-7233	L=180mm φ5mm Flue gas temp. 0 ~ 650°C L=750mm φ6mm Flue gas temp. 0 ~ 650°C L=750mm φ8mm Flue gas temp. 0 ~ 1100°C
Ambient air temp. sensor	HT-2305	0 ~ 100°C
Temperature probe	Kthermocouple	HT-1251a φ3×130L, 0~950°C, air/liquids HT-1252a φ1.5×130L, 0~950°C, air/liquids HT-1253a φ3×130L, 0~400°C, air/liquids/foods, centric top HT-1254a 130L, 0~400°C, surface/lifts/liquids, paddle top HT-1255a φ4×130L, 0~650°C, surface/air/liquids HT-1256a 0~450°C, magnetic probe for surface HT-1257a 0~180°C, pliers probe for plate, tube
CO purge pump	HT-2321	For CO sensor protection
Pressure sensor unit	HT-2303	Pressure, Differential pressure, Draft pressure
Draft probe	HT-1050A	L=180mm φ5mm hose length3000mm
Case	HT-2315	340mm×490mm×125mm 3kg
Measurement software for PC (RS232cable)	HT-2094	Online View 2000 (Recommended OS : Windows 7/8.1/10)
Measurement software for PC (RS232cable・USB cable)	HT-2084	Online View 2000 (Recommended OS : Windows 7/8.1/10)
Bluetooth module *4	HT-2333	For measurement software
IR Printer	HT-1610	Roll paper×1 AA battery×4
IR Printer roll paper	HT-1636	5rolls
Pressure exchanger	HT-1100	Exchange pressure of 5 positions.
Pitot tube	HT-3051	L=300mm φ6mm

*1 : Compensate measured value when measure flue gas include H₂ components.

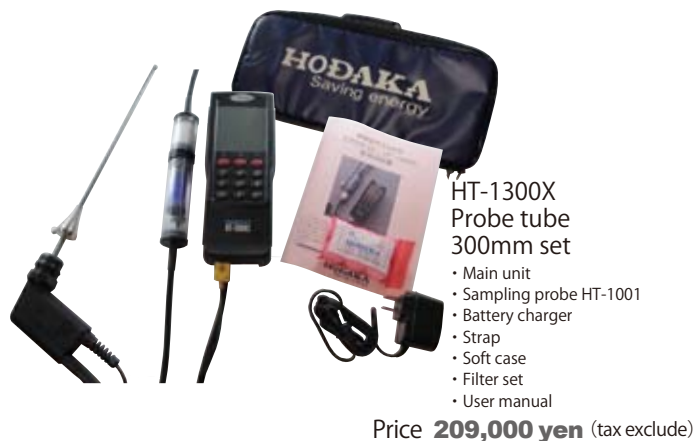
*2 : The higher value is valid.

*3 : Depend on area flue gas may have difference, so calculated data also may have difference.

*4 : Measurement software is necessary. (HT-2094 or HT-2084) .

* Accuracy is based on cylinder gas.

This specification might be changed for improvement.

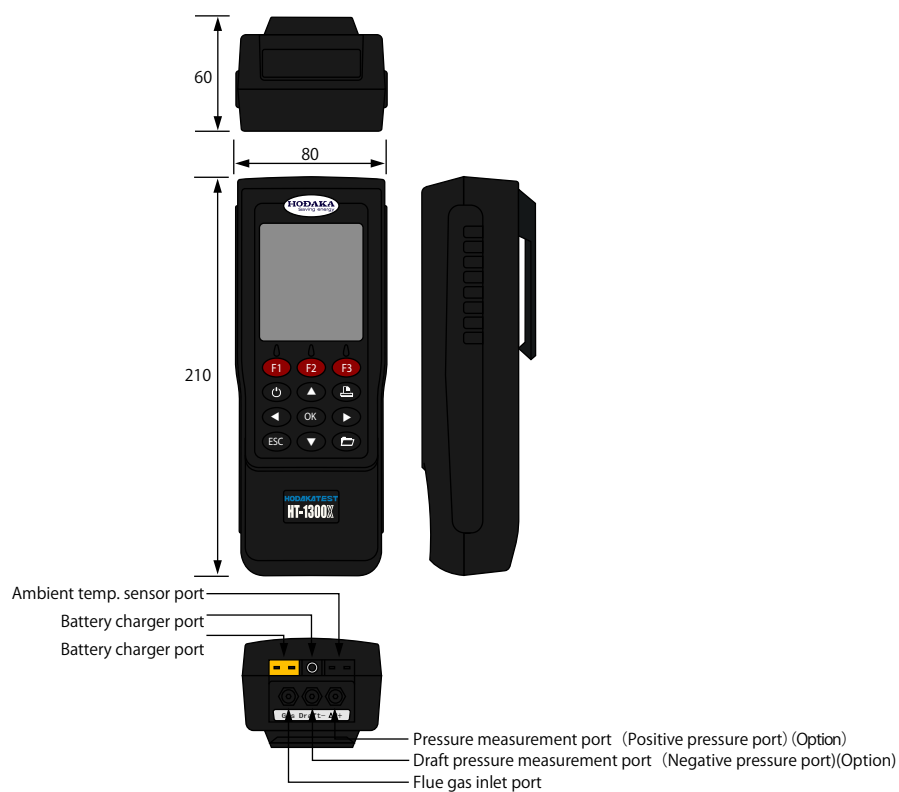


Dimension

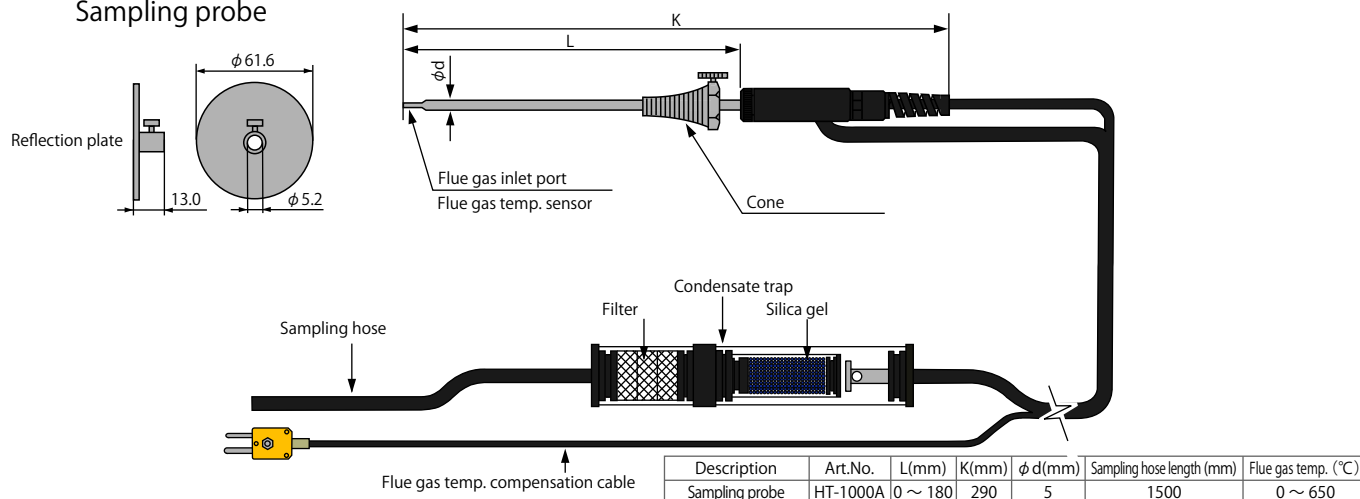


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Main unit



Sampling probe



Option

