

Flue gas Analyzer

HT-1300Z



O₂

0 ~ 20.9 vol%

CO

H₂ compensation

0 ~ 10000ppm

CO

high

0 ~ 10.00vol%

NO

0 ~ 3000ppm

NO

low

0 ~ 300ppm

NO₂

0 ~ 500ppm

SO₂

0 ~ 4000ppm

°C

0 ~ 650°C

hPa

±100hPa

Sensor selectable

Max. 4 sensors can be mounted depend on your measurement propose.
You can select O₂, CO, CO high, NO, NO Low, NO₂ and SO₂.

Very light • Compact

Weight about 880g • Size 80×210×60mm. Handy and easy to carry.

Pressure measurement

Draft pressure, differential pressure, air pressure and gas pressure.

Bright display with LCD backlit

Switchable indication on display, 4 measurement items or 8 measurement items

Operation keypad

Easy to push, and kindness design for customer.

CO purge pump as standard item

Protect CO sensor from rapid CO concentration rising.

Genious option

Selectable the option depend on you

Ordering sample

O₂ 0 ~ 20.9 vol% HT-1840	CO H ₂ compensation 0 ~ 10000ppm HT-1841	High CO 0 ~ 10.00vol% HT-1842	NO 0 ~ 3000ppm HT-1843	Low NO 0 ~ 300ppm HT-1844	NO₂ 0 ~ 500ppm HT-1845	SO₂ 0 ~ 4000ppm HT-1846
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typeS O₂ CO H₂compensation Sampling probe Price 210,000 yen (tax exclude)	typeA O₂ CO H₂compensation NO Sampling probe CO Purge pump Price 319,000 yen (tax exclude)	typeB O₂ CO Low NO Sampling probe CO Purge pump Price 319,000 yen (tax exclude)	typeC O₂ High CO Sampling probe Price 303,000 yen (tax exclude)	typeD O₂ CO H₂compensation NO NO₂ Sampling probe CO Purge pump Price 470,000 yen (tax exclude)	typeE O₂ NO NO₂ SO₂ Sampling probe Price 513,000 yen (tax exclude)
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HT-1300Z

- Main unit
- Sampling probe
- Battery charger
- Carrying strap
- Soft case
- Filter set
- User manual



Option



Flue gas analyzer HT-1300Z

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℃ For air temperature
Attache case HT-2315		size 500×420×125mm 2.3kg
Measurement Software Online View 2000 HT-2084		With RS232 cable and USB cable Recommended OS : Windows 7/8.1/10
Bluetooth module HT-1833	Built-in	For measurement software
CO purge pump HT-2321	Built-in	Protect the CO sensor
Pressure sensor unit HT-2303	Built-in	Pressure, differential pressure, draft pressure
Draft probe HT-1050		L=180mm φ 5mm Hose length 3000mm
Probe handle HT-7201SS HT-7202SS		Sampling hose length 2700mm
Probe tube HT-7230		L=300mm φ 6mm Flue gas temp. 0~ 650℃
Probe tube HT-7235		L=500mm φ 6mm Flue gas temp. 0~650℃
Probe tube HT-7232		L=750mm φ 6mm Flue gas temp. 0~650℃
Probe tube HT-7233		L=750mm φ 8mm Flue gas temp. 0~1100℃

Specifications

Measurement items

O ₂	Measurement range	0 ~ 20.9vol%
	Accuracy	±0.2vol%
	Resolution	0.1vol%
	Response time	<20sec.
CO (H ₂ compensation) *1	Measurement range	0 ~ 2000ppm (Max. over load 10000ppm)
	Accuracy	±10ppm or ±5%Reading (0 ~ 2000ppm) *2 ±10%Reading (2001 ~ 10000ppm)
	Resolution	1ppm
	Response time	<40sec. (0 ~ 2000ppm) <60sec. (2001 ~ 10000ppm)
CO high	Measurement range	0.00 ~ 4.00vol% (Max. over load 10.00vol%)
	Accuracy	±0.02vol% or ±5%Reading (0.00 ~ 2.00vol%) *2 ±10%Reading (2.01 ~ 10.00vol%)
	Resolution	0.01vol%
	Response time	<60sec. (0.00 ~ 2.00vol%) <100sec. (2.01 ~ 10.00vol%)
NO	Measurement range	0 ~ 1000ppm (Max. over load 3000ppm)
	Accuracy	±5ppm or ±5% Reading (0 ~ 1000ppm) *2 ±10% Reading (1001 ~ 3000ppm)
	Resolution	1ppm
	Response time	<40sec. (0 ~ 1000ppm) <60sec. (1001 ~ 3000ppm)
NO low	Measurement range	0 ~ 300ppm
	Accuracy	±2ppm (0.0 ~ 39.9ppm) ±5%Reading (40.0 ~ 300ppm)
	Resolution	0.1ppm (0.0 ~ 99.9ppm) 1ppm (100 ~ 300ppm)
	Response time	<40sec.
NO ₂	Measurement range	0 ~ 200ppm (Max. over load 500ppm)
	Accuracy	±10ppm (0 ~ 200ppm) ±10%Reading (201 ~ 500ppm)
	Resolution	1ppm (0.1ppm) *3
	Response time	<60sec. (0 ~ 200ppm) <100sec. (201 ~ 500ppm)
SO ₂	Measurement range	0 ~ 2000ppm (Max. over load 4000ppm)
	Accuracy	±10ppm or ±5% Reading (0 ~ 2000ppm) *2 ±10% Reading (2001 ~ 4000ppm)
	Resolution	1ppm
	Response time	<60sec. (0 ~ 2000ppm) <100sec. (2001 ~ 4000ppm)
Pressure	Measurement range	±100 h Pa
	Accuracy	F.S. ±2%
	Resolution	0.01 h Pa
Flue gas temperature	Measurement range	0 ~ 650°C 0 ~ 1100°C (depend on probe tube)
	Accuracy	0 ~ 100°C : ±2°C 100°C ~ : ±2% Reading
	Resolution	0.1°C (0 ~ 999.9°C)、1°C (1000 ~ 1100°C)
Ambient air temperature	Measurement range	0 ~ 100°C
	Accuracy	±2°C
	Resolution	0.1°C

Calculated items*4

CO ₂ (Only CO ₂ sensor mounted units)	0 ~ CO ₂ Max (calculated from O ₂)
NO _x	0 ~ calculated value (valid at NO ₂ sensor non mounted unit)
O ₂ Calculated items	0 ~ calculated value (User selectable O ₂)
Excess air	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	Galvanic battery
CO (H ₂ Compensation)	Electrochemical sensor
CO (CO high)	Electrochemical sensor
NO	Electrochemical sensor
NO (NO low)	Electrochemical sensor
NO ₂	Electrochemical sensor
SO ₂	Electrochemical sensor
Flue gas temp.	Kthermocouple
Ambient air temp.	Kthermocouple
Pressure	Piezoresistive sensor

Main unit

Temperature	Operation : +0°C ~ +45°C Storage : -20°C ~ +50°C
Display	Dot matrix 8 line ⇄ 4 line Switchable
Size	(W×H×D) 80×210×60 mm
Weight	About 680g
Power	Battery charger (AC100-240V 50/60Hz DC9V 550mA) NiMH battery (Max. 12hours continuous operation)

Standard equipment

Built - in	Pump、Interface for PC (RS232)、 CO Purge pump*5、Data logger (Storage up to 100 data)、 Interface for printer	
Accessory	Battery charger、Sampling hose、Condensate trap、Shoulder strap、 Soft case、Filter set	
Description	Art. No.	Spec./remarks
Sampling probe	HT-1011	L=300mm φ6mm Flue gas temp. 0 ~ 650°C Hose length2700mm
	HT-1012*6	L=300mm φ6mm Flue gas temp. 0 ~ 650°C Hose length2700mm

Option

Probe handle	HT-7201SS	Sampling hose length2700mm
	HT-7202SS*6	Sampling hose length2700mm
Probe tube (Flue gas temp. sensor)	HT-7230	L=300mm φ6mm Flue gas temp. 0 ~ 650°C
	HT-7235	L=500mm φ6mm Flue gas temp. 0 ~ 650°C
	HT-7232	L=750mm φ6mm Flue gas temp. 0 ~ 650°C
	HT-7233	L=750mm φ8mm Flue gas temp.0 ~ 1100°C
Ambient air temp. sensor	HT-2305	0 ~ 100°C
Temperature probe	K thermocouple	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	Protect for CO sensor
Pressure sensor unit	HT-2303	Pressure, Differential pressure, Draft pressure
Draft probe	HT-1050	L=180mm φ5mm hose length3000mm
Attach case	HT-2315	500mm×420mm×125mm 2.3 Kg
Measurement software for PC (with RS232cable・USB cable)	HT-2084	Online View 2000 (OS:Windows 7/8.1/10)
Measurement software for PC	HT-2074	Online View 2000 (OS Windows 7/8 1/10)
Bluetooth module	HT-1833	For measurement software
IR printer	HT-1610	Roll paper×1 AA battery ×4
IR printer roll paper	HT-1636	5 rolls

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

*2 : The higher value is valid.

*3 : For the device which has low NO sensor, accuracy at measurement range 0.0ppm ~ 99.9ppm is 0.1ppm.

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

*5 : Not for the device which does not have CO sensor and typeS.

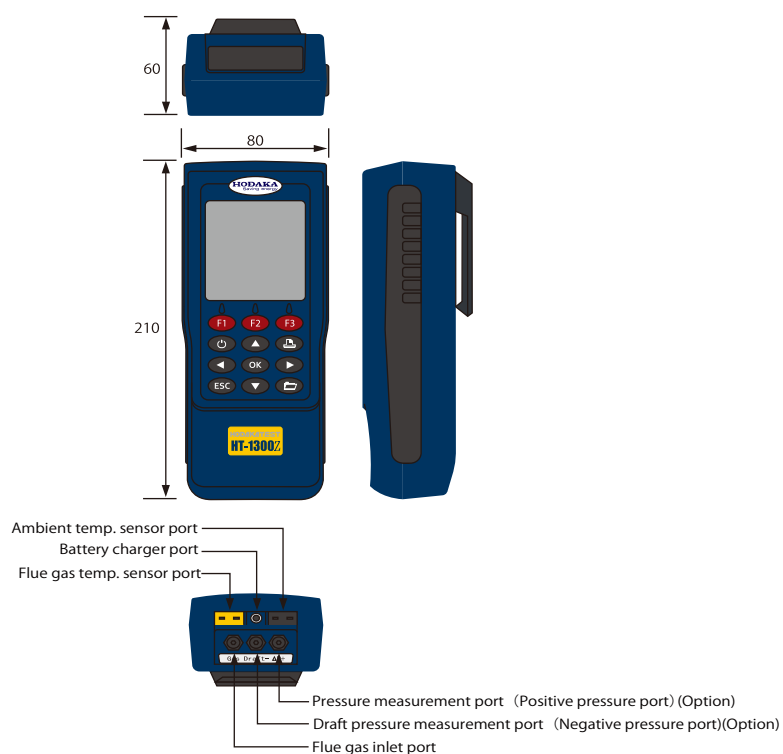
*6 : For high CO/NO₂/SO₂ measurement.

Measurement software is necessary. (HT-2074)

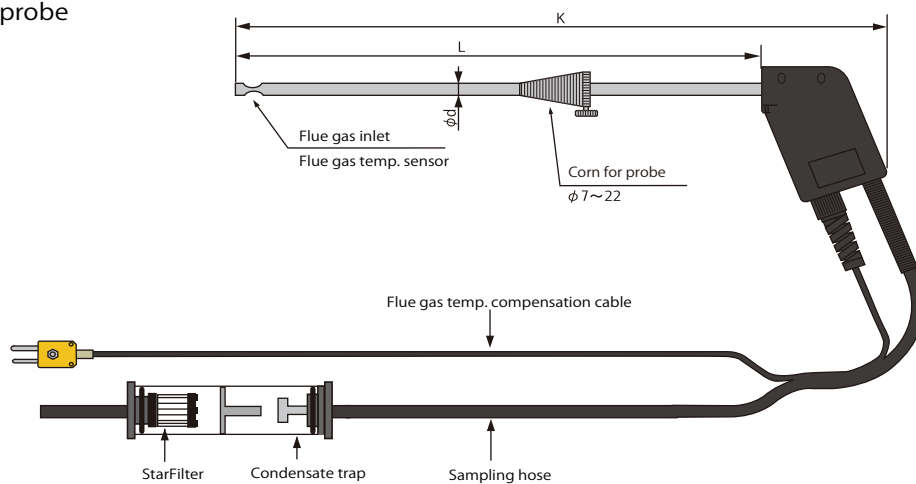
*7 : Accuracy is based on cylinder gas.

Dimension

Main unit



Sampling probe



Description	Art. No.	L(mm)	K(mm)	φ d(mm)	Sampling hose (mm)	Flue gas temp. (°C)
Sampling probe	HT-1011	0 ~ 300	370	6	2700	0 ~ 650
	HT-1012*	0 ~ 300	370	6	2700	0 ~ 650

* HT-1002 is for NO₂, SO₂, high CO measurements.