

Flue gas analyzer

# HT-1200N/1200NT



**O<sub>2</sub>**  
0 ~ 20.9 vol%

**°C**  
0 ~ 650°C

## Measurement item ;

1200N ; O<sub>2</sub>

1200NT ; O<sub>2</sub> · Temperature

## Calculated items ; CO<sub>2</sub> and more.

CO<sub>2</sub> is calculated from O<sub>2</sub> concentration based on selectable fuel data.

## Easy to measure air ratio





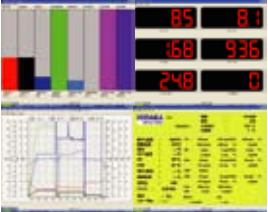



## O<sub>2</sub>Alarm

Selectable O<sub>2</sub> alarm threshold value.

## Integrated Data logger

Data storage up to 100 data.

## Option

IR Printer HT-1610		Roll paper x 1 AAbattery x 4
Printer paper HT-1636		5 rolls
Ambient air temperature sensor HT-1321		0 ~ 100°C For air temperature
Attach case HT-1315		Made by aluminium Size 350×460×155mm 2.9kg
Measurement Software for PC Online View 2000 HT-2084		RS232 transfer cable USB cable Recommended OS : Windows 7/8.1/10
Battery charge for abroad HT-1318		AC100 ~ 240V
Probe handle HT-7201A		Sampling hose length 1800mm Inc. condensate trap
Probe tube HT-7230		L=300mm φ6mm Flue gas temp.; 0 ~ 650°C
Probe tube HT-7235		L=500mm φ6mm Flue gas temp.; 0 ~ 650°C
Probe tube HT-7232		L=750mm φ6mm Flue gas temp.; 0 ~ 650°C
Probe tube HT-7233		L=750mm φ8mm Flue gas temp.; 0 ~ 1100°C

## Specification

### Measurement items

O <sub>2</sub>	Measurement range Accuracy Resolution	0 ~ 20.9vol% ±0.2vol% 0.1vol% <10 sec.
Temperature G (K thermocouple)	Response time Measurement range Accuracy Resolution	0 ~ 650°C 0 ~ 1100°C (depend on probe tube) ±1°C or ±1% reading (0 ~ 650°C) *1 ±2% reading (650.1 ~ 1100°C) 0.1°C (0 ~ 999.9°C) 1°C (1000 ~ 1100°C)
Temperature A (Pt2000Ω) *2	Measurement range Accuracy Resolution	0 ~ 100°C ±1°C 0.1°C

### Calculated items\*3

CO <sub>2</sub>	0 ~ CO <sub>2</sub> Max. (calculation from O <sub>2</sub> value)
Air ratio	1.0 ~ 50.0
Losses	0 ~ 100% (only with K thermocouple and Pt2000Ω)
Efficiency	0 ~ 100% (only with K thermocouple and Pt2000Ω)

### Fuel

13A, 6C, LPG, Kerosine, light oil, heavy A, heavy C, Pellet

### Sensor

O <sub>2</sub>	Electrochemical
Temperature G	K thermocouple
Temperature A	Pt2000Ω

### Main unit

Temperature	Operating : 0°C ~ +45°C Storage : -20°C ~ +60°C
Display	Dotmatrix 4 lines
Size	(W×H×D) 80×150×35 mm
Weight	Approx.350g
Power	Battery charger (AC100V 50/60Hz DC12V 100mA) Integrated Nicd rechargeable battery (Max.8hours continuous operation)

### Standard equipment ※Select one of probes

Integrated	Pump, Interface for PC (RS232) Data logger (possible to store 100 data), Interface for printer	
Accessory	Battery, Sampling probe, Condensate trap, Reflection plate, Carrying case, Softcase, Filter set	
Description	Art. No.	Spec. / remarks
Sampling probe/HT-1200N	HT-1229DS	L=180mm φ5mm, with condensate trap, w/o temp.measurement
Sampling probe (with flue gas temp. sensor)/HT-1200NT	HT-1007	L=180mm φ5mm, with condensate trap, flue gas temp.0 to 650°C

### Option

Probes		
Long probe	HT-1235DS	L=690mm φ6mm, with condensate trap, w/o temp.measurement
L-Probe	HT-1238DS	L=120mm φ5mm, with condensate trap, w/o temp.measurement
L-Probe	HT-1006LS	L=120mm φ5mm, with condensate trap, flue gas temp.0 to 650°C
Probe handle		
Probe handle	HT-7201AS	with hose, condensate trap
Probe tube (for probe handle HT-7201AS)		
Probe tube	HT-7230	L=300mm φ6mm, flue gas temp.0 to 650°C
(With flue gas temp. sensor)	HT-7235	L=500mm φ6mm, flue gas temp.0 to 650°C
	HT-7232	L=750mm φ6mm, flue gas temp.0 to 650°C
	HT-7233	L=750mm φ8mm, flue gas temp.0 to 1100°C
	Temp. probe	Kthermocouple
		HT-1253a φ3×130L, 0~400°C, for air/liquids/food, centric top
		HT-1254a 130L, 0~400°C, for surface /ripts/air/liquid
		HT-1255a φ4×130L, 0~650°C, for surface /air/liquid
		HT-1256a 0~450°C, magnetic probe for surface
		HT-1257a 0~180°C, Pliers probe for plates, tube
Air temp.probe	Pt2000Ω	HT-1382 0~100°C, for air
Ambient air temp.sensor	Pt2000Ω	HT-1321 0~100°C
Battery charger	HT-1318	AC100~240V
Hard case	HT-1315	Aluminum, dimension : 350×460×155,weight : 2.9kg
Measurement software (with RS232 cable+USB conversion cable)	HT-2084	Online View 2000 (Recommended OS : Windows 7/8.1/10)
Infrared printer	HT-1610	Roll paper ×1 AA battery × 4
Roll paper for printer	HT-1636	5 rolls
Food	HT-1376	for hot water supply device (gas/oil), stove

\*1 : Compensate the measured value when measure flue gas include H<sub>2</sub>.

\*2 : The higher value is applied as accuracy.

\*3 : Ambient air temp. (optional items) sensor is needed.

\* Accuracy is based on cylinder gas.

Specification might be changed without notice.



#### HT-1200N Standard set

- Main unit
- Sampling probe HT-1229DS
- Battery charger
- Carrying case
- Softcase
- Filter set
- Operating manual

Price **115,000yen**  
(tax excluded)



#### HT-1200NT Standard set

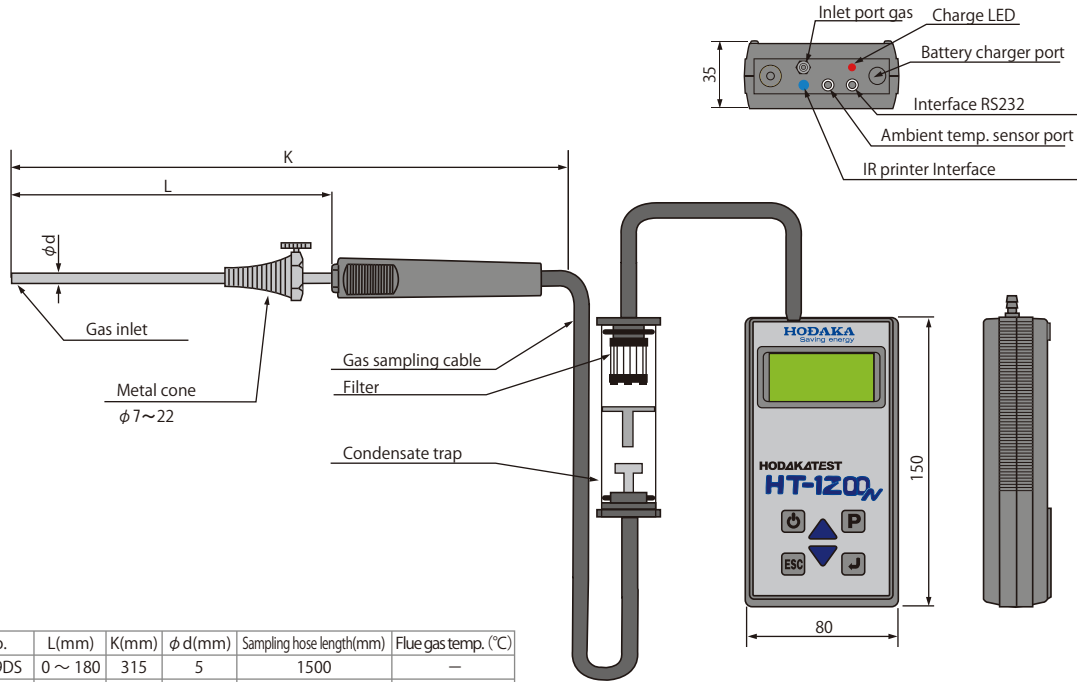
- Main unit
- Sampling probe HT-1007
- Battery charger
- Carrying case
- Softcase
- Filter set
- Operating manual

Price **129,000yen**  
(tax excluded)

# Flue gas analyzer HT-1200N/1200NT

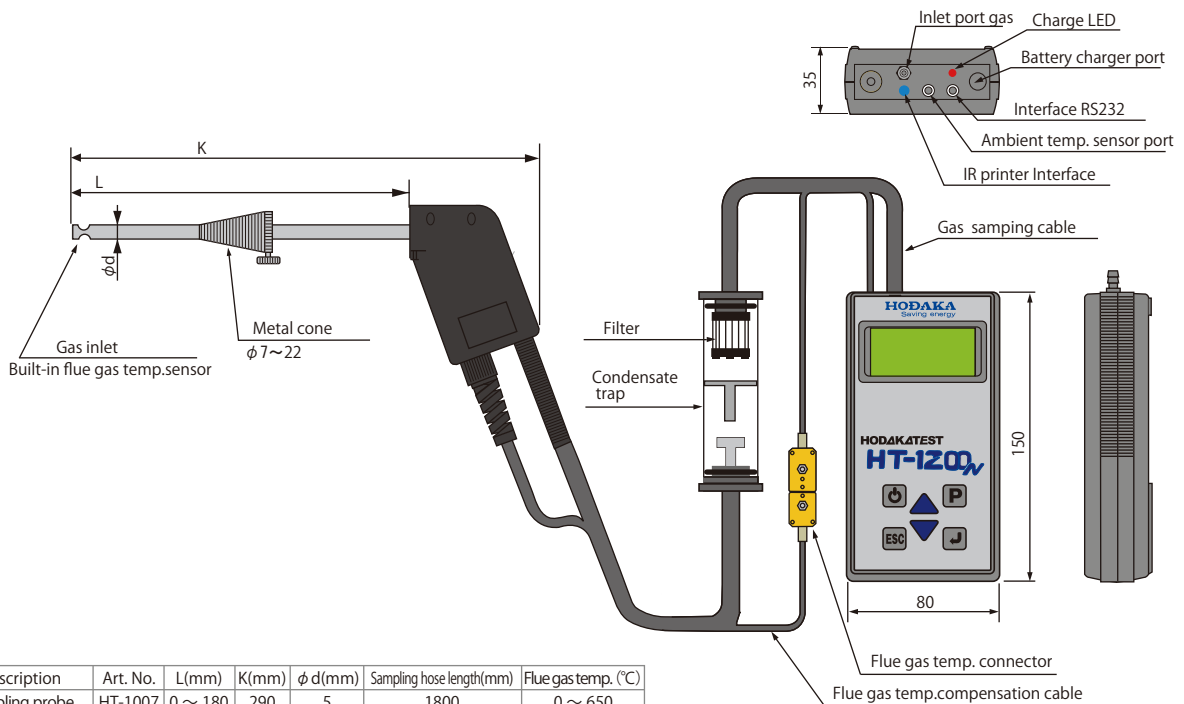


## HT-1200N



Description	Art.No.	L(mm)	K(mm)	φ d(mm)	Sampling hose length(mm)	Flue gas temp. (°C)
Sampling probe	HT-1229DS	0 ~ 180	315	5	1500	—
Long probe	HT-1235DS	0 ~ 690	790	6	1500	—

## HT-1200NT



Description	Art. No.	L(mm)	K(mm)	φ d(mm)	Sampling hose length(mm)	Flue gas temp. (°C)
Sampling probe	HT-1007	0 ~ 180	290	5	1800	0 ~ 650