

燃焼排ガス分析計

HT-2700



CO₂ Actual measurement by means of CO₂ NDIR bench (option)

Simultaneous measurement up to 6 gas components.

Sensor selectable

In addition to O₂ (standard equipment), you can select CO, CO Low, CO high, NO, NO Low, NO₂, SO₂ and CO₂ (NDIR)

Very light • Compact

Weight about 880g • Size 112×244×54mm
Portable type

Super bright color display with LCD backlit

Switchable indication on display, 2 measurement items or 6 measurement items.

Pressure measurement • Differential pressure measurement

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

O₂ Long life 0 ~ 21.0 vol%	CO H ₂ compensation 0 ~ 10000ppm	Low CO H ₂ compensation 0 ~ 300ppm	High CO 0 ~ 10.00vol%	NO 0 ~ 3000ppm	Low NO 0 ~ 300ppm
NO₂ 0 ~ 500ppm	SO₂ 0 ~ 4000ppm	CO₂ NDIR 0 ~ 20.00vol%	°C 0 ~ 650°C	hPa ±100hPa	

<p>O₂ Long life 0 ~ 21.0 vol%</p>	<p>CO H₂Compensation 0 ~ 10000ppm HT-2706</p>	<p>High CO 0 ~ 10.00vol% HT-2723</p>	<p>NO 0 ~ 3000ppm HT-2707</p>	<p>NO₂ 0 ~ 500ppm HT-2708</p>	<p>SO₂ 0 ~ 4000ppm HT-2722</p>	<p>CO₂ NDIR 0 ~ 20.00vol% HT-2726</p>
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O₂/CO/CO₂ price ¥813,000 (tax exclude)

<p>O₂ Long life</p>	<p>CO H₂Compensation</p>	<p>CO₂</p>	<p>Sampling probe</p>
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O₂/COhigh/CO₂ Price ¥866,000 (tax exclude)

<p>O₂ Long life</p>	<p>High CO</p>	<p>CO₂</p>	<p>Sampling probe</p>
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5 components measurement O₂/CO/NO/NO₂/SO₂ Price ¥1,095,000 (tax exclude)

<p>O₂ Long life</p>	<p>CO H₂Compensation</p>	<p>NO</p>	<p>NO₂</p>	<p>SO₂</p>	<p>Sampling probe</p>
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6 components measurement O₂/CO/NO/NO₂/SO₂/CO₂ Price ¥1,274,000 (tax exclude)

<p>O₂ Long life</p>	<p>CO H₂Compensation</p>	<p>NO</p>	<p>NO₂</p>	<p>SO₂</p>	<p>CO₂</p>	<p>Sampling probe</p>
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HT-2700 Standard set









- Main unit
- Sampling probe
- Battery charger
- Pressure measurement hose
- Carrying strap
- Test cap
- ABS case
- User manual



Option

Flue gas analyzer
HT-2700



IR Printer HT-1610		Roll paper x 1 AAbattery x 4
Printer paper HT-1636		5 rolls
Ambient air temperature sensor HT-2305		0 ~ 100°C For air temperature
Measurement Software Online View 2000 HT-2074		Recommended OS: Windows XP/7
Bluetooth module HT-2733	Built-in	Measurement software
Auto measurement function HT-2746	Built-in	Data logging function, user-specific adjustable
Flow measurement function HT-2747	Built-in	flow velocity measurement by mean of pitot tube
Pitot tube HT-3051		L=300mm ϕ 6mm
Pitot tube HT-3052		L=500mm ϕ 6mm
Pitot tube HT-3053		L=800mm ϕ 6mm
Pitot tube HT-3054		L=1000mm ϕ 8mm
CO Purge pump HT-2721	Built-in	For protect CO sensor
Arctic transport bag HT-2790		180×320×120mm
Draft probe HT-1050B		L=180mm ϕ 5mm Hose length 3000mm
Probe handle HT-7205		Sampling hose length 2700mm
Probe tube HT-7230		L=300mm ϕ 6mm 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 Long life	Measurement range	0 ~ 21.0vol%
	Accuracy	±0.3vol%
	Resolution	0.1vol%
	Response time	<30sec.
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	<40 sec.(0 ~ 2000ppm) <60 sec.(2001 ~ 10000ppm)
CO low (H ₂ compensation) *1	Measurement range	0 ~ 300ppm
	Accuracy	±2ppm (0.0 ~ 39.9ppm) ±5% reading (40.0 ~ 300ppm)
	Resolution	0.1ppm
	Response time	<40 sec.
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	1ppm or 0.01vol% (0 ~ 10000ppm) 0.01vol% (10000ppm ~)
	Response time	<60 sec. (0.00 ~ 2.00vol%) <100 sec. (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	<40 sec. (0 ~ 1000ppm) <60 sec. (1001 ~ 3000ppm)
NO low	Measurement range	0 ~ 300ppm
	Accuracy	±2ppm (0.0 ~ 39.9ppm) ±5% reading (40.0 ~ 300ppm)
	Resolution	0.1ppm
	Response time	<40 sec.
NO ₂	Measurement range	0 ~ 200ppm (Max. over load 500ppm)
	Accuracy	±10ppm (0 ~ 200ppm) ±10% reading (201 ~ 500ppm)
	Resolution	1ppm
	Response time	<60 sec. (0 ~ 200ppm) <100 sec.(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	<60 sec. (0 ~ 2000ppm) <100 sec. (2001 ~ 4000ppm)
CO ₂	Measurement range	0.00 ~ 20.00vol%
	Accuracy	±0.50vol% or ±5% reading *2
	Resolution	0.01vol%
	Response time	<40 sec.
Pressure	Measurement range	±100hPa
	Accuracy	F.S.±2%
	Resolution	0.01hPa
Flue gas temperature	Measurement range	0 ~ 650°C 0 ~ 1100°C (depend on probe tube)
	Accuracy	Measured value = 0 ~ 100°C: ±2°C Measured value = 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*3

CO ₂ (Only CO ₂ sensor mounted units)	0 ~ CO ₂ Max (Calculation from O ₂)
NO _x	0 ~ calculated value (Only NO ₂ sensor non-mounted units)
O ₂ Calculated items	0 ~ calculated value (User-specified O ₂)
Excess air	1.00 ~ 19.9
Losses	0 ~ 99.9%
Efficiency	0 ~ 100%
Dew point	0 ~ 99°C
Velocity	3 ~ 100m/s
Flow rate	0 ~ calculated value

Fuel

13A, 12A, 6C, 5C, 5B, LPG, Kerosine, Right oil, Banker A, Banker B, User-specified fuel

Sensor

O ₂	Electrochemical
CO (H ₂ compensation)	Electrochemical
CO low (H ₂ compensation)	Electrochemical
CO high	Electrochemical
NO	Electrochemical
NO low	Electrochemical
NO ₂	Electrochemical
SO ₂	Electrochemical
CO ₂	NDIR
Flue gas temp.	K thermocouple
Ambient air temp.	K thermocouple
Pressure	Piezoregistive semiconductor sensor

Main unit

Temperature	Operation : +5°C ~ +45°C Storage : -20°C ~ +50°C
Display	TFT color display 6 lines⇔2 lines switchable indication
Size	(W×H×D) 112×244×54 mm
Weight	Approx.880g
Power	Battery charger (AC100-240V 50/60Hz DC5V 1200mA) lithium-ion rechargeable (Max.8hours continuous operation)

Standard equipment

Built-in	Pump, Mini-USB interface, Data logger, Interface for printer	
Accessory	Battery charger (USB cable), Sampling probe, Condensate trap, Shoulder strap, Hose for pressure measurement, ABS case	
Description	Art.No.	Spec. / remarks
Sampling probe	HT-1010	L=300mm φ6mm Flue gas temp.0 ~ 650°C Hose length2700mm

Option

Probe tube	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
Probe handle	HT-7205	Sampling hose length 2700mm
Draft probe	HT-1050B	L=180mm φ5mm hose length 3000mm
Ambient air temp. sensor	HT-2305	0 ~ 100°C
Auto measurement function	HT-2746	Data logging function, user-specific adjustable
Flow measurement function*4	HT-2747	flow velocity measurement by mean of pitot tube
Pitot tube	HT-3051	L=300mm φ6mm
	HT-3052	L=500mm φ6mm
	HT-3053	L=800mm φ6mm
	HT-3054	L=1000mm φ8mm
CO purge pump	HT-2721	For COsensor protection
Measurement software for PC	HT-2074	Online View 2000 (Recommended OS : Windows XP/7)
SD card interface	HT-2774	SD card (2GB)
SD card	HT-2702	2GB
Bluetooth module*5	HT-2733	For measurement software
IR Printer	HT-1610	Roll paper×1 AA battery ×4
IR Printer roll paper	HT-1636	5rolls

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

*2 : The higher value is the applicable ones.

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

*4 : Select HT-3051 ~ HT-3054 Pitot tube.

*5 : Measurement software (HT-2074) is necessary.

* Accuracy is based on cylinder gas.

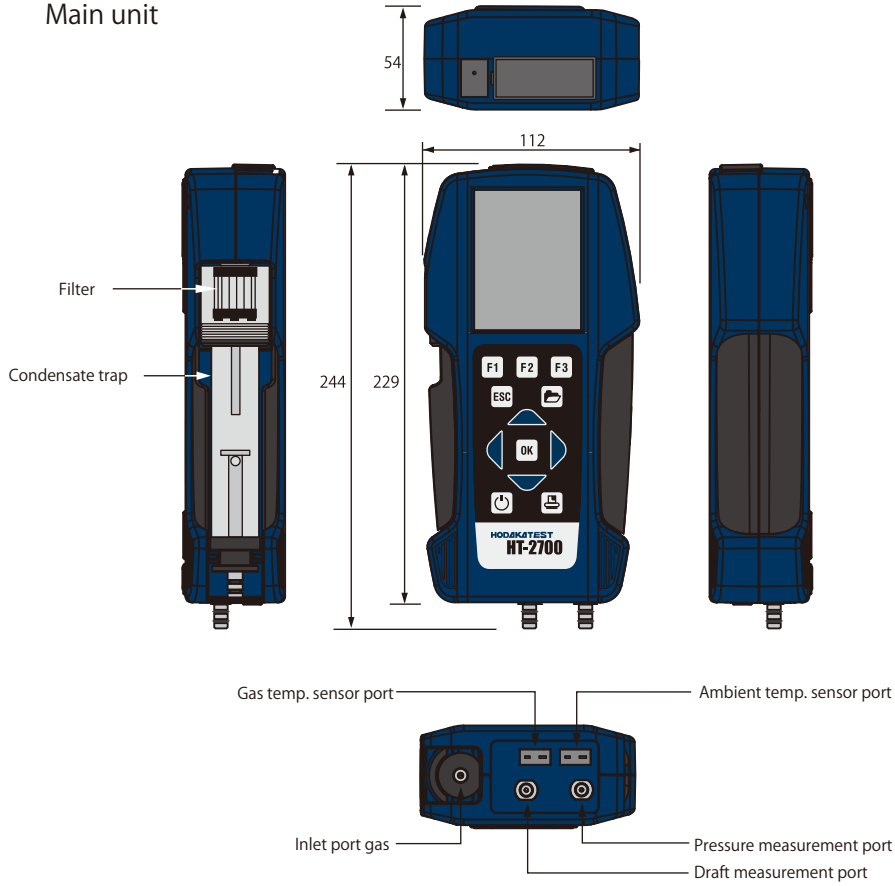
This specification might be changed for improvement.

Dimension

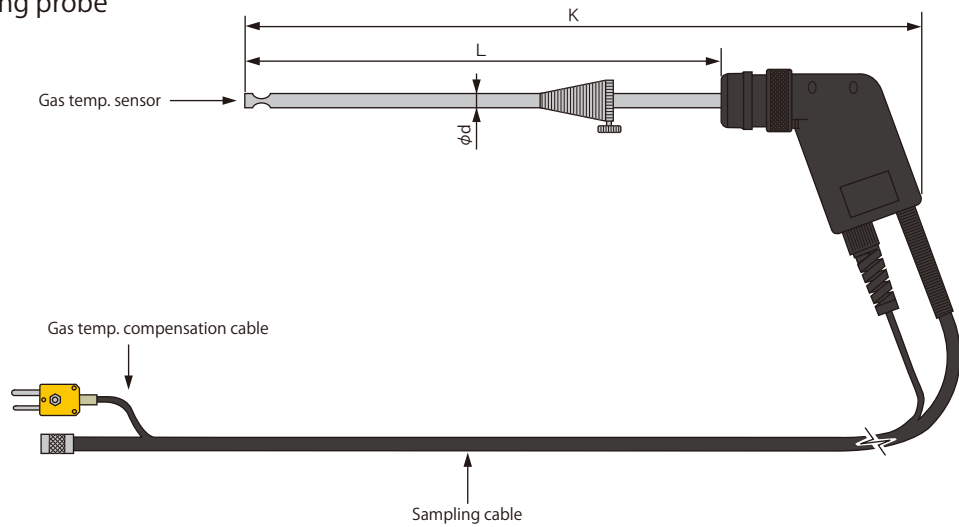
Flue gas analyzer HT-2700



Main unit



Sampling probe



Description	Art.No.	L(mm)	K(mm)	ϕd (mm)	Sampling hose length(mm)	Gas temp. (°C)
Sampling probe	HT-1010	0 ~ 300	370	6	2700	0 ~ 650