HT-2700

CO_2 Actual measurement by means of CO_2 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 6measurement items.

Pressure measurement・Differential pressure measurement

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

O_2	CO	Low CO	High CO	NO	Low NO
Long life	H2 compensation	H2 compensation			
0 ～ 21.0 vol%	0 ～ 10000ppm	0 ～ 300ppm	0 ～ 10.00vol%	0 ～ 3000ppm	0 ～ 300ppm

NO_2	SO_2	CO_2	℃	hPa
		NDIR		
0 ～ 500ppm	0 ～ 4000ppm	0 ～ 20.00vol%	0 ～ 650℃	±100hPa

Ordering sample

O_2	CO	High CO	NO	NO_2	SO_2	CO_2
Long life	H_2 Compensation					NDIR
0 ~ 21.0 vol%	0 ~ 10000ppm	0 ~ 10.00vol%	0 ~ 3000ppm	0 ~ 500ppm	0 ~ 4000ppm	0 ~ 20.00vol%
	HT-2706	HT-2723	HT-2707	HT-2708	HT-2722	HT-2726

O2/CO/CO2

O_2	CO	CO_2	Sampling probe
Long life	H_2Compensation		

O2/COhigh/CO2

O_2	High CO	CO_2	Sampling probe
Long life			

5components measurement O2/CO/NO/NO2/SO2

O_2	CO	NO	NO_2	SO_2	Sampling probe
Long life	H_2Compensation				

6 components measurement O2/CO/NO/NO2/SO2/CO2

O_2	CO	NO	NO_2	SO_2	CO_2	Sampling probe
Long life	H_2Compensation					

HT-2700
Standard set

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

Flue gas analyzer

HT-2700

Option

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℃ 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 φ6mm
Pitot tube HT-3052		L=500mm φ6mm
Pitot tube HT-3053		L=800mm φ6mm
Pitot tube HT-3054		L=1000mm φ8mm
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 φ5mm Hose length 3000mm
Probe handle HT-7205		Sampling hose length 2700mm
Probe tube HT-7230		L=300mm φ6mm Flue gas temp. 0 ～ 650℃
Probe tube HT-7235		L=500mm φ6mm Flue gas temp. 0 ～ 650℃
Probe tube HT-7232		L=750mm φ6mm Flue gas temp. 0 ～ 650℃
Probe tube HT-7233		L=750mm φ8mm Flue gas temp. 0 ～ 1100℃

Specification

Measurement items

O_2 Long life	Measurement range	0～21.0vol%
	Accuracy	±0.3vol%
	Resolution	0.1vol%
	Response time	<30sec.
CO (H_2compensation)＊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_2compensation)＊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℃ 0～1100℃(depend on probe tube)
	Accuracy	Measured value＝0～100℃: ±2℃ Measured value＝100℃～: ±2% reading
	Resolution	0.1℃(0～999.9℃)、1℃(1000～1100℃)
Ambient air temperature	Measurement range	0～100℃
	Accuracy	±2℃
	Resolution	0.1℃

Calculated items＊3

CO_2（Only CO_2 sensor mounted units）	0～CO_2Max（Calculation from O_2）
NOx	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℃
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_2compensation)	Electrochemical
CO low (H_2compensation)	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℃～+45℃ Storage：−20℃～+50℃
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℃ Hose length2700mm

Option

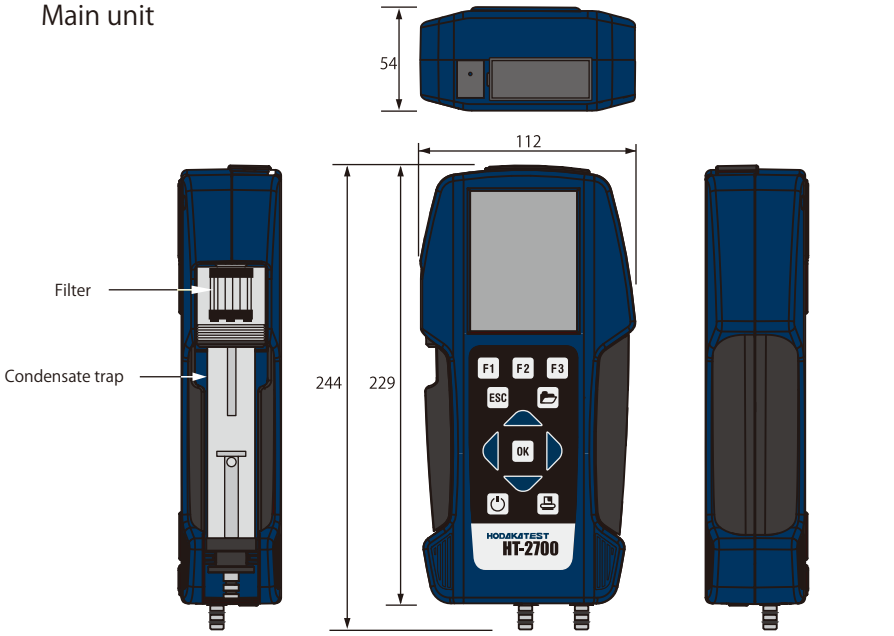
Probe tube	HT-7230	L=300mm φ6mm flue gas temp.0～650℃
	HT-7235	L=500mm φ6mm flue gas temp.0～650℃
	HT-7232	L=750mm φ6mm flue gas temp.0～650℃
	HT-7233	L=750mm φ8mm flue gas temp.0～1100℃
Probe handle	HT-7205	Sampling hose length 2700mm
Draft probe	HT-1050B	L=180mm φ5mm hose length 3000mm
Ambient air temp. sensor	HT-2305	0～100℃
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

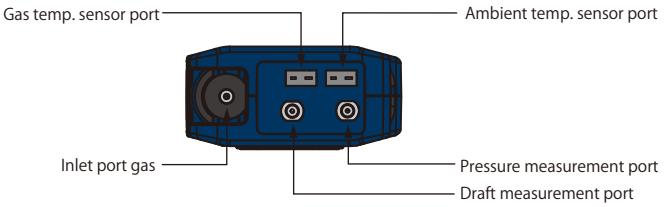
＊1：Compensate measured value when measure flue gas include H_2 components.
＊2：The higher value is the applicable ones.
＊3：Depend on area flue gas may have difference, so calculated data also may have difference.
＊4：Select HT-3051～HT-3054 Pitot tube.
＊5：Measurement software（HT-2074）is necessary.
＊Accuracy is based on cylinder gas.

This specification might be changed for improvement.

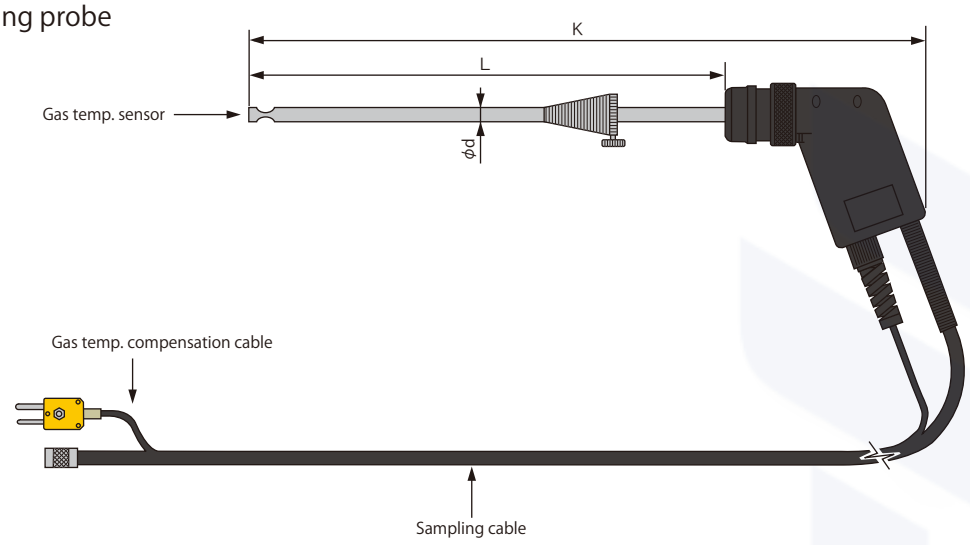
Dimension

Main unit





Sampling probe



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