Specifications Sheet	No.SPEC-3306E (1st Edition)
OM7000A	**COULOMETER**

OUTLINE

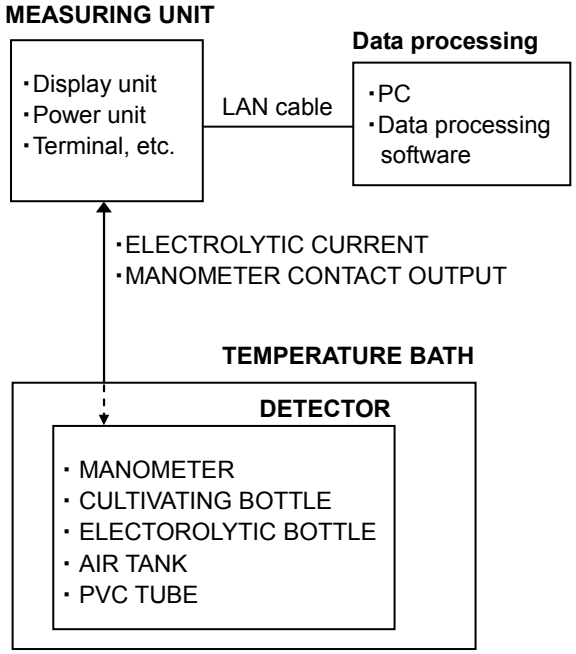
The OM7000 is a coulometrlc bod measuring equipment developed by government industrial department laboratory, Hokkaido and Ohkura. Its application extends to measuring decomposition of chemicals by bacteria (microscopic organism), sewage disposal simulation in waste treatment, automating and quantifying tissue culture in pathology. Evaluating effectiveness of vaccine and antibiotics, measurement of respiratory and oxygen consumption in chemical, marine products and agricultural industries.
Can perform the Print of various calculations and the test result in combination with data processing software by having changed the Measuring unit from the paper chart Expression recorder to the touch panel system indicator.

FEATURES

- Measurement by automated oxygen supply
  Be most suitable for straight Degradating test such as OECD test guidelines 301C, JIS K 6950.
- Touch panel system indicator
  Adopted an exclusive touch panel system indicator as an operation part and display. Can confirm a result as a chart by simple operation and a trendy display.
- Be possible in combination with conventional products
  The Measuring unit is accessible to conventional thermostatic ovens such as OM7000. Can just use the glasswares such as the Electrolytic bottle, too.
- Data processing software
  Prepared data processing software for Windows7.
  Can perform processing such as a calculation, the Print of data by being able to be connected to eight Measuring unit with one PC, and using data processing software.
- Estimates BOD_5 using raw sample solution
- One time measurement of 6 samples in temperature bath
- Direct readout of oxygen consumption in "ppm" or "mg"
- O-ring sealed cultivating bottle

BLOCK DIAGRAM

The OM7000A consists of a detector, a temperature bath and a measuring unit.
This Coulometer is comprised of a detecting element, a thermostatic oven part, Measuring unit. In addition, the Coulometer data processing section is comprised of a PC, data processing software (for exclusive use of the Coulometer) and an LAN cable.
The private telecommunication boards are still less necessary because they perform the communication between Measuring unit - PC in an Ethernet.



The PC body does not include in annotation.

SPECIFICATIONS

Sensitivity: 0.2 ppm
Operation temperature-humidity: 5～30°C, 35 - 85%RH
Power input Voltage: 100VAC±10VAC 50/60Hz,
220VAC±22VAC 50/60Hz
Power consumption: Approx. 1070VA
Equipment weight: Approx. 220kg

Measuring unit

Measurement range: 15 mg (50ppm), 30 mg (100ppm), 75 mg (250ppm), 150 mg (500ppm), five phases of reshuffling of 300 mg (1,000ppm)
Measurement score: 6 points
Temperature input: Score, 2 points
Temperature element,; Pt100
Measuring range,; 0.0-100.0°C
Accuracy: Electrolytic current; ±1% of rdg
Temperature input; ±0.5°C
Indicator: 5.7 inches of TFT color LCD (320*240 dot) touch panels, with backlight. Display measured value, a chart.
Operation button: The number of the buttons;3
Function, REC, Test initiation / stop
MENU, Various setting windows display
FUNC, Do not use
Record function: Outside recording medium;
SD memory card (available only for an operation check product correspondence in SD/SDHC technical standard)
internal memory, Approximately 100MB file preservation period, One minute
Alarm function: Warning kind, Temperature warning
・High-low-limit check alarm
・Deviation alarm
Totalizing monitoring warning
・Manometer continuation ON
・Manometer continuation OFF
・Integral velocity abnormality
・Electrolysis current value abnormality
Alarm output: Output, 2 points
Contact rating, 3A/250VAC, 3A/30VDC
Communication: An Ethernet, a transmission type: 10BASE-T
Memory back up: Test data and the parameter are the inside. Save in flash memory. The clock backs up with a built-in lithium battery (battery life approximately five years at the time of no conducting).
Power consumption: Approx. 55VA Max
Weight: Approx. 5 kg

DETECTOR

Manometer: Sensitivity 9.806Pa (1mAq, 0.2 ppm), silver Electrode, contents of copper sulfate solution
Electrolytic bottle: Capacity 500ml, electrode platinum and copper, contents saturated copper sulfate solution and 5% sulfuric acid
Cultivating bottle: 300ml with absorbent container
Stirrer: 540rpm/50Hz or 650rpm/60Hz for 6 bottles

TEMPERATURE BATH

Method: Forced ventilation Expression
Dimension: W1050 X H1363 X D710mm
Ambient air temperature: 5～30℃
Control mode:
SSR drive, ON/OFF control (refrigerator continuous running)
Temperature set point: 5～40°C
Temperature distribution: ±1°C
Power supply: 100VAC 50/60Hz or 220VAC 50/60Hz (the deployment trans other than 100VAC)
Power consumption: Approx. 1kVA
Equipment weight: Approx. 180 kg
Refrigerator: Reciprocating type refrigerator (180W)
Refrigerant, R-134a
Temperature controller:
Digital temperature controller made in Ohkura Electric
Type, EC5502R00020
-150.0～+150.0°C, Pt100
Magnetic Stirrer specifications:
Permanent magneto Magnetic Stirrer, Six
(1) Standard specifications
100VAC 3W 540rpm/650rpm turns clockwise (50/60Hz)
(2) Direction of rotation inversion specifications
With timer for the Magnetic Stirrer inversion (all channels are common specifications and equivalence standard as for the revolution speed) Turn clockwise, and the timer 1～60sec setting for the timer 1 ～10min setting possible stop for rotating anticlockwise is possible
(3) Revolution speed variableness specifications
Setting possibility range 70～800rpm available for revolution speed setting every each channel
Thermostatic oven power cable:
With 100VAC specifications 3P plug

Data processing system

Operating environment: OS, Windows7
Junction number: Up to eight (for none of the PCs)
Junction method: Ethernet

STANDARD ACCESSARIES

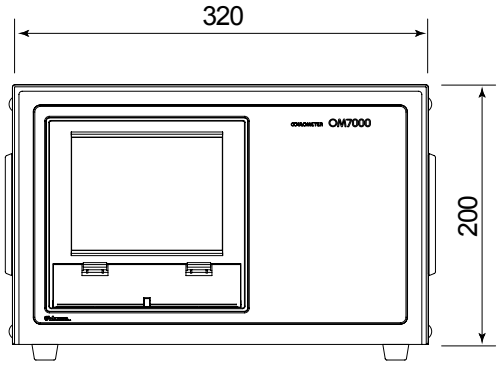
DESCRIPTION	QUANTIFY	DESCRIPTION	QUANTIFY
Manometers including spares	7	Silicone grease (50g)	1
Cultivating bottle including spares	7	Seal tape	1
Air tank including spares	7	Liquid paraffin	1
Electrolytic bottle kit	6	Beaker (1l for drain)	1
Tube	18	Fuse (15A) for heater	1
Cable	1	SD memory card（SLC type）	1
Manometer rubber cap with electrode	20	Coulometer instruction manual	1
Stirrer chip (Φ10 ×50)	6	Temperature controller instruction manual	1
Copper sulfate (500g)	2		
Soda lime (500g)	1		

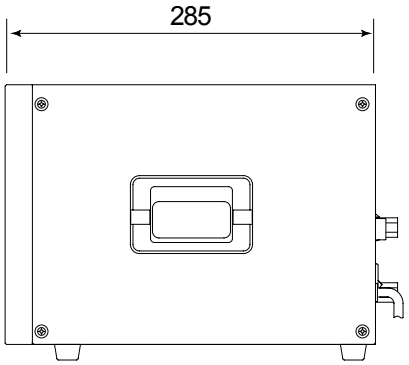
MODEL CODE NUMBER

MODEL	POWER INPUT	STIRRER	Configu ration	Option	Software	Special specifications	DESCRIPTION
OM7000A							
	1						100VAC 50/60 Hz
	2						220VAC 50/60 Hz
	9						Custom (consult factory)
		0					None
		1					Standard single direction cw, 540 rpm at 50Hz, 650rpm at 60Hz
		2					Bi – directional, 10 min. by cw, 1 min. stop and 10 min. by ccw, 540rpm/ 50Hz 650/ 60Hz
		3					Single direction cw, adjustable rotation between 70 and 800 rpm
			1				Complete set
			2				Only as for the Measuring unit
				0			None
				9			Custom (consult factory)
					0		None
					1		Standard specifications
					2		Straight Degradating test
					9		Others
						0	None
						9	Custom (consult factory)

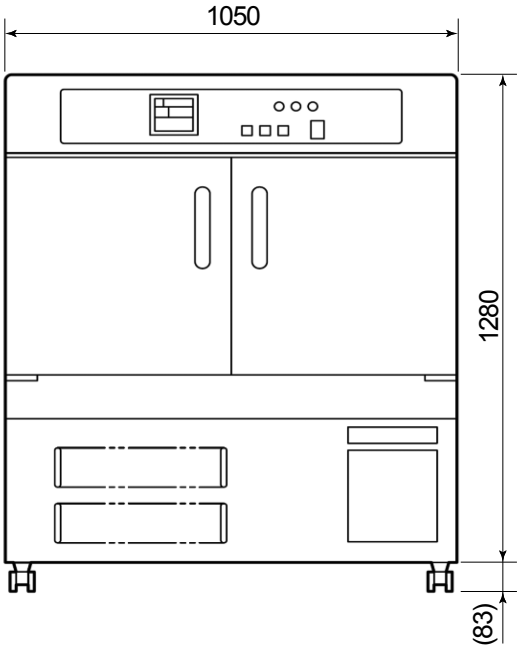
DIMENSIONS (Unit: mm)

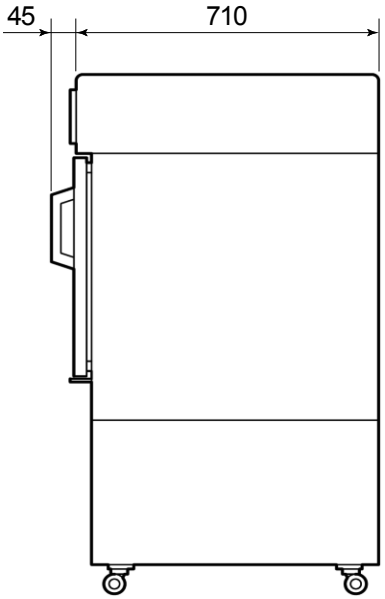
●MEASURING UNIT





●TEMPERATURE BATH





Note 1) Windows7, Excel are the registered trademarks of Microsoft Corporation of the U.S.A.
Note 2) Ethernet is the registered trademark of Xerox Corporation.

⚠CAUTION
Do not install this device before consulting instruction manual

Specifications are subject to change without notice.
For further information, a quotation or a demonstration please contact to:

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