



Automatic Digital Refractometer

RX-5000X

Cat.No.3261

High Accuracy



Features

- Automatic measurement at your targeted temperature
- Internal Peltier Thermo-module eliminates the need for an external water-bath
- High accuracy with the latest technology
- 30 User-programmable scales available
- Manual Calibration can be performed by the operator
- History function
- User-Friendly Operation



Application

Refractive Index(nD)

Light oil	Liquid Medicine
Heavy oil	Insulating oil
Crude oil	Heavy water
Industrial medicine	etc.
Flavor	
Citrus oil	
Chemicals	
Methylene chloride	
Polymer	
Vegetable oils and fats	
Edible oil	
Animal oils and fats	
Spice oils	

Brix Measurements

Fruit juice	Glucose
Soft drinks	Starch
Tea drinks	Honey
Oolong tea	Jam
Green tea	Condensed milk
Coffee drinks	Soy sauce
Cocoa drinks	Sauce (various)
Lactic drinks	Ketchup
Alcohol drinks	Soup
Soybean milk	Wort
Concentrated fruit juice	Vinegar
Tomato juice	Pickle (liquid)
Puree	Waste liquid of sugar
Canned syrup	etc.
Liquid sugar	

User Scale Measurements

Lubricating oil	Protein
Water-soluble cutting oil	Injection liquid
Quenching oil	Surfactant
Water-soluble detergent	Cupric sulfate
Coolant and brine solutions	Formalin
Ethylene glycol	Gelatin
Propylene glycol	Cesium chloride
Rust preventive	Salt water
isopropyl alcohol	Calcium chloride
PVA	Seawater
Ethanol	Fire extinguishing solution
Alkaline solution	Coating solution
NaOH	H2O2
Sodium carbonate	DMF
Sodium glutamate	Ammonia
Acetic acid	Urine
Citric acid	Sizing liquid
Amino acid	Waste liquid of alcohol
Glycerin	etc.

■ Specifications

DIGITAL REFRACTOMETER RX-5000 α

Cat.No.	: 3261
Measuring system	: Optical-refraction,critical-angle detection system
Constant-temperature function	: Built in Peltier Thermo-module
Measurement scales	: Brix (Automatic Temperature Compensation), Refractive index(nD), User scale (30 User-defined Scales can be inputted)
Measurement range	: Brix 0.00 to 95.00%, Refractive index (nD) 1.32700 to 1.58000
Minimum indication	: Brix 0.01%, Refractive index (nD): 0.00001, Temperature : 0.01°C
Measurement accuracy	: Brix : ±0.03% (on measurement of sucrose), Refractive index (nD) : ±0.00004
Measurement modes	: MODE1... This is the standard and most accurate mode of measurement. The sample's temperature is adjusted to the set target temperature and then the measurement is taken. MODE2... This mode is used to measure the sample quickly and when accuracy is not as critical. After the START key is pressed, the unit measures the refractive index and temperature at short intervals and displays the estimated value at the target temperature. MODE3... This mode is the quickest way to measure and is best suited when the properties of the sample are changing constantly. In this mode, the unit starts measuring immediately after the START key is pressed. A time delay can also be programmed to postpone the measurement after pressing START.
Automatic temperature compensation range for Brix	: 5.00 to 60.00°C
Measurement temperature	: 5.00 to 60.00°C (the lower limit is the room temperature minus 10°C)
Temperature display accuracy	: ±0.05°C
Display method	: Back lit LCD (320 x 240 dpi)
Graphic display	: Setting upper and lower standard values, a graphic upper and lower limit bar can be displayed with the value.
Input of user scale	: By simply inputting 3 corresponding points of the user scale (in relation to refractive index) the RX-5000 α will calculate the conversion formula automatically. Unit (% , g/100g, g/100ml, mol/l, %mas, %vol, no unit) can be displayed.
History function	: 30 previous measurements are stored and can be displayed or printed.
Zero adjustment	: Zero point is adjusted with distilled water.
Manual calibration	: Calibration can be set manually to any standard (within a certain range)
Output	: • Digital Printer DP-62 α (optional) • Communication method: RS-232C
Power supply	: AC100 to 240V, 50/60Hz
Power consumption	: 480VA
Light source	: LED (Approximating to wavelength of D line)
Materials	: • Prism: Artificial Sapphire • Sample stage : SUS 316
Sample volume	: Greater than 0.1 ml
Environmental operating conditions	: Temperature: 5 to 40°C, Humidity: Max. 90%RH, Altitude (above sea level): Max. 5,000 m
Dimensions and weight	: 37×26×14cm, 9kg

■ Options

Digital Printer DP-62 α

Cat.No.	: 3019
Input method	: Conforms to Centronics standard (with connection cable)
Type of printer	: Thermal dot matrix printer
Printable items	: Refractive index, Brix, User scale, Temperature, Date, Month, Year, Time
Power supply	: DC8.5V from the RX-5000 α
Power consumption	: 13VA
Dimensions and weight	: 7×16×7cm, 580g



Adapter for volatile samples

Parts No. : RE-56151



EXPLANATION OF ICONS Icons for functions, specifications and scales have been added to this catalog.

* Interface RS-232C	* Can be connected with printer	* User scales can be inputted	* Measurement at a set temperature	* Automatic Temperature Compensation
* Interface RS232C pour PC	* Sortie imprimante	* Echelles à façon programmables	* Mesure à température constante programmable	* Compensation automatique de température
* Interface RS232C	* Verbindung mit Personalcomputer	* Eingabe von Anwendertabellen	* Messung bei voreingestellter Temperatur	* Automatische Temperaturkompensation
* Interfaccia RS232C	* Collegabile a stampante esterna	* Scale di misura impostabili dall'utente	* Misura a temperatura prefissata	* Compensazione automatica della temperatura
* Interface RS232C	* Connexion para impresora	* Definición de escalas de usuario programables	* Medida a temperatura prefijada	* Compensación de automática de temperatura
* RS-232C输出	* 可與印表機連結	* 可輸入用戶自訂刻度	* 可設定測量溫度	* 自動溫度補償
* Calibration with water	* Digital display	* AC outlet(AC100 to 240V)	* Refractive index scale	
* Calibration 1 point* sur eau distillée	* Affichage numérique	* Alimentation secteur(CA 100 à 240 V)	* Indice de réfraction	
* Kalibrierung mit Wasser	* Digital Anzeige	* AC Ausgang (AC 100 bis 240V)	* Skala fuer Refraktive Index	
* Calibracion con agua	* Display digitale	* Uscita AC(AC 100 240V)	* Indice di rifrazione	
* Calibration con agua	* Pantalla digital	* Conexión a 240V CA	* Escala de indice de refracción	
* 用水歸零	* 數字顯示	* AC插座(AC 100至240V)	* 折射率刻度	
* Compensation automatically	* Compensation automatique de température	* Automatische Temperaturkompensation	* Compensazione automatica della temperatura	* Compensación de automática de temperatura
* Compensation automatically	* Compensation automatique de température	* Compensation automatica della temperatura	* Compensation de automática de temperatura	* 自動溫度補償

HACCP G.M.P. G.L.P.

ATAGO products are acknowledged by G.M.P. and G.L.P. systems.

Specifications and appearances are subject to change without notice

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