## **RX Series Specifications List**

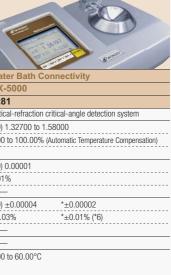
		ATAGO's Flagship, Most Accurate and Full Range	ATAGO's Flagship, Most Accurate and Full Range	ATAGO's Basic Model
Model		RX-5000i-Plus	RX-5000α-Plus	RX-5000i
Cat.No.		3275	3266	3276
Measurement system		Optical-refraction critical-angle detection system	Optical-refraction critical-angle detection system	Optical-refraction critical-angle detection system
Measurement Range	Refractive index	(nD) 1.32422 to 1.58000	(nD) 1.32700 to 1.58000	(nD) 1.32422 to 1.58000
	Brix	0.000 to 100.000% (Automatic Temperature Compensation)	0.000 to 100.000% (Automatic Temperature Compensation)	0.00 to 100.00% (Automatic Temperature Compensation)
	User scale	100	60	100
Resolution	Refractive index	(nD) 0.00001	(nD) 0.00001	(nD) 0.00001
	Brix	0.001%	0.005%	0.01%
	Temperature	0.01°C	0.01°C	0.01°C
Measurement Accuracy	Refractive index	(nD) ±0.00002 *±0.00001	(nD) ±0.00002 *±0.00001	(nD) ±0.00004 *±0.00002
(*repeatability)	Brix	±0.010% *±0.010% (*1)	±0.010% *±0.010% (*2)	±0.03% *±0.01% (*2)
	Temperature	±0.05°C	±0.05°C	±0.05°C
Mode		MODE-S, 1, 2, 3, T	MODE-S, 1, 2, 3	MODE-S, 1, 2, 3
Temperature control range	)	5.00 to 75.00°C	5.00 to 60.00°C	5.00 to 75.00°C
		(No lower than 10°C below or higher than 55°C above the ambient temperature)	(Lowest is ambient temp -10°C)	(No lower than 10°C below or higher than 55°C above the ambient temperature)
Environmental operating conditions		Temperature 5 to 40°C; Humidity 90%RH and below, Altitude 2,000m above sea level	Temperature 5 to 40°C; Humidity 90%RH and below, Altitude 2,000m above sea level	Temperature 5 to 40°C; Humidity 90%RH and below, Altitude 2,000m above sea level
Display method		7.5-inch color LCD + touch screen	LCD with illuminating backlight	7.5-inch color LCD + touch screen
Output		Computer - USB, Printer and PC (via RS-232C)	Printer and PC (via RS-232C)	Computer - USB, Printer and PC (via RS-232C)
Light source		LED (Approximating to D-Line wavelength)	LED (Approximating to D-Line wavelength)	LED (Approximating to D-Line wavelength)
Materials Prism Sample stage		Synthetic sapphire	Synthetic sapphire	Synthetic sapphire
		SUS316	SUS316	SUS316
Power supply		AC100 to 240V 50/60Hz	AC100 to 240V 50/60Hz	AC100 to 240V 50/60Hz
Power Consumption		90VA	65VA	90VA
Dimensions and weight		37×26×14cm, 6.6kg (main unit only)	37×26×14cm, 6.4kg (main unit only)	37×26×14cm, 6.6kg (main unit only)

		Wide Range and High Accuracy	Wide Range, High Temperature and Accuracy	Wide Range
Model		RX-9000i	RX-9000α	RX-7000i
Cat.No.		3278	3263	3279
Measurement system		Optical-refraction critical-angle detection system	Optical-refraction critical-angle detection system	Optical-refraction critical-angle detection system
Measurement Range	Refractive index	(nD) 1.32422 to 1.70000	(nD) 1.32500 to 1.70000	(nD) 1.32422 to 1.70000
	Brix	0.00 to 100.00% (Automatic Temperature Compensation)	0.00 to 100.00% (Automatic Temperature Compensation)	0.00 to 100.00% (Automatic Temperature Compensation)
	User scale	100	30	100
Resolution	Refractive index	(nD) 0.00001	(nD) 0.00001	(nD) 0.00001 (Factory default setting 0.0001)
	Brix	0.01%	0.01%	0.01% (Factory default setting 0.1%)
	Temperature	0.01°C	0.01°C	0.01°C
Measurement Accuracy	Refractive index	(nD) ±0.00004 *±0.00002 (*3)	(nD) ±0.00004 *±0.00002 (*3)	(nD) ±0.0001 *±0.00005
*repeatability)	Brix	±0.03% *±0.01% (*4)	±0.03% *±0.01% (*4)	±0.1% *±0.02% (*2)
	Brix	±0.05% *±0.01% (*5)	±0.05% *±0.01% (*5)	—
	Temperature	±0.05°C	±0.05°C	±0.05°C
Node		MODE-S, 1, 2, 3	MODE-S, 1, 2, 3	MODE-S, 1, 2, 3
Temperature control range	•	5.00 to 75.00°C	5.00 to 70.00°C	5.00 to 75.00°C
g-		(No lower than 10°C below or higher than 55°C above	(Lowest is ambient temp -10°C)	(No lower than 10°C below or higher than 55°C above
		the ambient temperature)	( · · · · · · · · · · · · · · · · · · ·	the ambient temperature)
Environmental operating c	onditions	Temperature 5 to 40°C; Humidity 90%RH and below,	Temperature 5 to 40°C; Humidity 90%RH and below,	Temperature 5 to 40°C; Humidity 90%RH and below,
		Altitude 2.000m above sea level	Altitude 2,000m above sea level	Altitude 2,000m above sea level
Display method		7.5-inch color LCD + touch screen	LCD with illuminating backlight	7.5-inch color LCD + touch screen
Output		Computer - USB, Printer and PC (via RS-232C)	Printer and PC (via RS-232C)	Computer - USB, Printer and PC (via RS-232C)
Light source		LED (Approximating to D-Line wavelength)	LED (Approximating to D-Line wavelength)	LED (Approximating to D-Line wavelength)
Materials Prism Sample stage		Synthetic sapphire	Synthetic sapphire	Synthetic sapphire
		SUS316	SUS316	SUS316
Power supply		AC100 to 240V 50/60Hz	AC100 to 240V 50/60Hz	AC100 to 240V 50/60Hz
Power Consumption		90VA	65VA	90VA
Dimensions and weight		37×26×14cm, 7.0kg (main unit only)	37×26×14cm, 6.8kg (main unit only)	37×26×14cm, 7.0kg (main unit only)

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		ATAGO's Basic Model	Flat Sample Stage	High Accuracy Digital Refractometer	
Model		RX-5000α	RX-5000α-Bev	RX-007α	
Cat.No.		3261	3271	3921	
Measurement system		Optical-refraction critical-angle detection system	Optical-refraction critical-angle detection system	Optical-refraction critical-angle detection system	
Measurement Range	Refractive index	(nD) 1.32700 to 1.58000	(nD) 1.32700 to 1.58000	(RI) 1.330150 to 1.341500	
	Brix	0.00 to 100.00% (Automatic Temperature Compensation)	0.00 to 100.00% (Automatic Temperature Compensation)	0.000 to 5.000% (Automatic Temperature Compensation)	
	User scale	60	60	30	
Resolution	Refractive index	(nD) 0.00001	(nD) 0.00001	(RI) 0.000001	
	Brix	0.01%	0.01%	0.001%	
	Temperature	0.01°C	0.01°C	0.01°C	
Measurement Accuracy	Refractive index	(nD) ±0.00004 *±0.00002	(nD) ±0.00004 *±0.00002	(RI) ±0.000010 (to 20°C)	
(*repeatability)	Brix	±0.03% *±0.01% (*2)	±0.03% *±0.01% (*2)	±0.005% (Ambient temperature and temperature	
	Temperature	±0.05°C	±0.05°C	±0.05°C compensation conditions apply)	
Mode		MODE-S, 1, 2, 3	MODE-S, 1, 2, 3	MODE-1, 2	
Temperature control range		5.00 to 60.00°C	5.00 to 60.00°C	15.00 to 30.00°C	
		(Lowest is ambient temp -10°C)	(Lowest is ambient temp -10°C)	(Lowest is ambient temp -5°C)	
Environmental operating conditions		Temperature 5 to 40°C; Humidity 90%RH and below, Altitude 2,000m above sea level	Temperature 5 to 40°C; Humidity 90%RH and below, Altitude 2,000m above sea level	Temperature 5 to 40°C; Humidity 90%RH and below, Altitude 2,000m above sea level	
Display method	Medical and a second	LCD with illuminating backlight	LCD with illuminating backlight	LCD with illuminating backlight	
Output		Printer and PC (via RS-232C)	Printer and PC (via RS-232C)	Printer and PC (via RS-232C)	
Light source		LED (Approximating to D-Line wavelength)	LED (Approximating to D-Line wavelength)	LED (Approximating to D-Line wavelength)	
Materials	Prism	Synthetic sapphire	Synthetic sapphire	Optical glass	
	Sample stage	SUS316	SUS316	SUS316	
Power supply		AC100 to 240V 50/60Hz	AC100 to 240V 50/60Hz	AC100 to 240V 50/60Hz	
Power Consumption		65VA	65VA	65VA	
Dimensions and weight		37×26×14cm, 6.4kg (main unit only)	37×26×14cm, 6.1kg (main unit only)	37×26×14cm, 6.7kg (main unit only)	

		Wide Range and High Temperature	Wate
Model		RX-7000α	
Cat.No.		3262	3281
Measurement system		Optical-refraction critical-angle detection system	Optica
Measurement Range	Refractive index	(nD) 1.32500 to 1.70000	(nD) 1
	Brix	0.00 to 100.00% (Automatic Temperature Compensation)	
	User scale	30	5
Resolution	Refractive index	(nD) 0.00001 (Factory default setting 0.0001)	(nD) 0
	Brix	0.01% (Factory default setting 0.1%)	0.019
	Temperature	0.01°C	—
Measurement Accuracy	Refractive index	(nD) ±0.0001 *±0.00005	(nD) ±
(*repeatability)	Brix	±0.1% *±0.02% (*2)	±0.03
	Temperature	±0.05°C	—
Mode		MODE-S, 1, 2, 3	
Temperature control range		5.00 to 70.00°C	5.00 1
		(Lowest is ambient temp -10°C)	
Environmental operating co	onditions	Temperature 5 to 40°C; Humidity 90%RH and below, Altitude 2,000m above sea level	Tempe
Display method		LCD with illuminating backlight	LCD v
Output		Printer and PC (via RS-232C)	Printe
Light source		LED (Approximating to D-Line wavelength)	LED (/
Materials Prism		Synthetic sapphire	Synth
	Sample stage	SUS316	SUS3
Power supply		AC100 to 240V 50/60Hz	AC10
Power Consumption		65VA	30VA
Dimensions and weight		37×26×14cm, 6.8kg (main unit only)	37×2
(*1) When measuring a sta	andard sucrose sol	ution of less than 50% Brix or standard refractive solution i	

(\*1) When measuring a standard sucrose solution of less than 50% Brix or standard refractive solution in MODE-1.
(\*2) When measuring a standard sucrose solution of up to 50% Brix or standard refractive index solution in MODE-(\*3) When DI is 1.33299 to 1.42009, at 10 to 30°C. For other ranges, nD is ±0.00010 \*±0.00005.
(\*4) When Brix is 0.00 to 50.00%, at 10.00 to 30.00°C.
(\*5) When Brix is 50.01 to 95.00%, at 10.00 to 30.00°C. For other ranges, Brix is ±0.10% \*±0.10%.
(\*6) When measuring a standard sucrose solution of up to 50% Brix or standard refractive index solution at 20°C.



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with illuminating backlight
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Approximating to D-Line wavelength)
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0 to 240V 50/60Hz
6×14cm, 6.4kg (main unit only)
E-1 and MODE-T at 20°C. DE-1 at 20°C.