

# RX Series Specifications List



	ATAGO's Flagship, Most Accurate and Full Range		ATAGO's Basic Model
Model	<b>RX-5000i-Plus</b>		<b>RX-5000i</b>
Cat.No.	<b>3275</b>		<b>3276</b>
Measurement system	Optical-refraction critical-angle detection system		
Measurement Range	Refractive index	(nD) 1.32422 to 1.58000	
	Brix	0.000 to 100.000% (Automatic Temperature Compensation)	
	User scale	100	
Resolution	Refractive index	(nD) 0.00001	
	Brix	0.001%	
	Temperature	0.01°C	
Measurement Accuracy (*repeatability)	Refractive index	(nD) ±0.00002    *±0.00001	
	Brix	±0.010%    *±0.010% (*1)	
	Temperature	±0.05°C	
Mode	MODE-S, 1, 2, 3, T		
Temperature control range	5.00 to 75.00°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		
Display method	7.5-inch color LCD + touch screen		
Output	Computer - USB, Printer and PC (via RS-232C)		
Light source	LED (Approximating to D-Line wavelength)		
Materials	Prism	Synthetic sapphire	
	Sample stage	SUS316	
Power supply	AC100 to 240V 50/60Hz		
Power Consumption	90VA		
Dimensions and weight	37×26×14cm, 6.6kg (main unit only)		



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



	Wide Range and High Accuracy		Wide Range, High Temperature and Accuracy	Wide Range
Model	<b>RX-9000i</b>		<b>RX-9000α</b>	<b>RX-7000i</b>
Cat.No.	<b>3278</b>		<b>3263</b>	<b>3279</b>
Measurement system	Optical-refraction critical-angle detection system			
Measurement Range	Refractive index	(nD) 1.32422 to 1.70000		
	Brix	0.00 to 100.00% (Automatic Temperature Compensation)		
	User scale	100		
Resolution	Refractive index	(nD) 0.00001		
	Brix	0.01%		
	Temperature	0.01°C		
Measurement Accuracy (*repeatability)	Refractive index	(nD) ±0.00004    *±0.00002 (*3)		
	Brix	±0.03%    *±0.01% (*4)		
	Temperature	±0.05°C    *±0.01% (*5)		
Mode	MODE-S, 1, 2, 3			
Temperature control range	5.00 to 75.00°C (No lower than 10°C below or higher than 55°C above the ambient temperature)		5.00 to 70.00°C (Lowest is ambient temp -10°C)	
Environmental operating conditions	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			
Output	Computer - USB, Printer and PC (via RS-232C)			
Light source	LED (Approximating to D-Line wavelength)			
Materials	Prism	Synthetic sapphire		
	Sample stage	SUS316		
Power supply	AC100 to 240V 50/60Hz			
Power Consumption	90VA			
Dimensions and weight	37×26×14cm, 7.0kg (main unit only)		37×26×14cm, 6.8kg (main unit only)	



	Wide Range and High Temperature		Water Bath Connectivity
Model	<b>RX-7000α</b>		<b>RX-5000</b>
Cat.No.	<b>3262</b>		<b>3281</b>
Measurement system	Optical-refraction critical-angle detection system		
Measurement Range	Refractive index	(nD) 1.32500 to 1.70000	
	Brix	0.00 to 100.00% (Automatic Temperature Compensation)	
	User scale	30	
Resolution	Refractive index	(nD) 0.00001 (Factory default setting 0.0001)	
	Brix	0.01% (Factory default setting 0.1%)	
	Temperature	0.01°C	
Measurement Accuracy (*repeatability)	Refractive index	(nD) ±0.0001    *±0.00005	
	Brix	±0.1%    *±0.02% (*2)	
	Temperature	±0.05°C	
Mode	MODE-S, 1, 2, 3		
Temperature control range	5.00 to 70.00°C (Lowest is ambient temp -10°C)		5.00 to 60.00°C
Environmental operating conditions	Temperature 5 to 40°C; Humidity 90%RH and below, Altitude 2,000m above sea level		
Display method	LCD with illuminating backlight		
Output	Printer and PC (via RS-232C)		
Light source	LED (Approximating to D-Line wavelength)		
Materials	Prism	Synthetic sapphire	
	Sample stage	SUS316	
Power supply	AC100 to 240V 50/60Hz		
Power Consumption	65VA		
Dimensions and weight	37×26×14cm, 6.8kg (main unit only)		37×26×14cm, 6.4kg (main unit only)

(\*1) When measuring a standard sucrose solution of less than 50% Brix or standard refractive solution in MODE-1 and MODE-T at 20°C.  
(\*2) When measuring a standard sucrose solution of up to 50% Brix or standard refractive index solution in MODE-1 at 20°C.  
(\*3) When nD 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.