

# ORION™ SERIES

## Analytical Balances

**Resolution up to  
1 / 3,200,000 !**

**A choice of units of measure:**

Gram, Milligram, Decimal Ounce(av), Carat, Pennyweight, Troy Ounce, Grain, Tola, Tael, & Momme

**Plus: Percentage Counting**



- Durable Construction
- NTEP (HR-60 Only)
- Small Footprint
- 5 Year Warranty

### Features

- Simple & Easy to Operate
- Adapts to your Environment
- GLP Software which outputs the calibration data & ID Number of the balance for calibration confirmation to the AD-8121B Printer
- Optional Battery Pack (HR-60, HR-120 & HR-200)
- System Diagnostics to alert operator of abnormal weighing conditions
- RS-232C (option for HR-60, HR-120 & HR-200. standard for HR-300i & HR-202i)
- Underhook capability for Density Measurement & Weighing Magnetic Materials

### Five popular capacities to choose from:

Model	Capacity	Resolution	Pan size
HR-60	60g	0.0001 g	Ø85 mm
HR-120	120g	0.0001 g	Ø85 mm
HR-200	210g	0.0001 g	Ø85 mm
HR-300i	320g	0.0001 g	Ø90 mm
HR-202i	220/51g	0.0001/0.00001 g	Ø90 mm

**Fax-on-Demand**

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# Specifications

	HR-60	HR-120	HR-200	HR-202i	HR-300i
Gram (g)	60 x 0.0001	120 x 0.0001	210 x 0.0001	220 x 0.0001/51 x 0.00001	320 x 0.0001
Milligram (mg)	60000 x 0.1	120000 x 0.1	210000 x 0.1	220000 x 0.1/51000 x 0.01	320000 x 0.1
Decimal Ounce (oz)	2.1 x 0.000005	4.2 x 0.000005	7.4 x 0.000005	7.76x0.00001/1.8 x 0.000001	11.29x0.00001
Troy Ounce (ozt)	1.9 x 0.000005	3.8 x 0.000005	6.7 x 0.00005	7.07x0.00001/1.64x0.000001	10.3 x 0.00001
Penneyweight (dwt)	38 x 0.0001	77 x 0.0001	135 x 0.0001	141.5x 0.0001/32.8x 0.00001	199 x 0.0001
Carat (ct)	300 x 0.001	600 x 0.001	1050 x 0.001	1100 x 0.001/255 x 0.0001	1550 x 0.001
Momme (mm)	16 x 0.00005	32 x 0.00005	56 x 0.00005	58.7 x 0.0001/13.6 x 0.00001	82 x 0.0001
Grain Unit (GNU)	925 x 0.002	1851 x 0.002	3240 x 0.002	3395 x 0.002/787 x 0.0002	4784 x 0.002
Toll (t)	5 x 0.00001	10 x 0.00001	18 x 0.00001	18.8x0.00001/4.37x0.000001	26 x 0.00001
Tael (TL)	1.5 x 0.000005	3.1 x 0.000005	5.5 x 0.000005	5.87x0.00001/1.36x0.000001	8.2 x 0.00001
Percentage Min. Div.	0.01%, 0.1% or 1% (auto prompt)				
Counting Min. Weight	0.1mg				
Linearity	±0.0002g		±0.0002g/±0.00003g		±0.0003g
Repeatability/Std. Dev.	0.0001g		0.0001/0.00002g		0.0002g
Stabil. Time (typically)	3 seconds		3.5 / 8 seconds		3.5 seconds
Sensitivity Drift	±2ppm / C (when automatic self calibration is not used)				
Display Refresh	5 times per second (stable) / 10 times per second (unstable)				
Pan Size	φ85mm / 3.3 in			φ90mm / 3.6 in	
Physical Dimensions mm	213 (W) X 319 (D) X 301 (H)			217 (W) X 442 (D) X 316 (H)	
Physical Dimensions inches	8.4 (W) X 12.6 (D) X 11.9 (H)			8.54 (W) X 17.4 (D) X 12.24 (H)	
Breeze Break mm	180 (W) X 192 (D) X 200 (H)			183 (W) X 148.5 (D) X 251 (H)	
Breeze Break inches	7.1 (W) X 7.5 (D) X 7.9 (H)			7.2 (W) X 5.84 (D) X 9.88 (H)	
Operating Temp.	5°C~40°C / 41°F~104°F RH less than 85%				
Weight (Approx.)	5.7 kg / 12.5 lb			8.0 kg/ 17.6 lb	
Power	*100, 120, 220, 240 VAC (AC Adapter) 50Hz/60Hz				
Standard Accessories	Manual, AC Adapter, Protective Display Cover, (HR-202i & HR-300i also include WinCT CD-ROM)				
Cal. Mass (Optional)	50g	100g	200g	20/50/100/200g	100/200/300g

Specifications are subject to without notice

\* Optional 10 Hours of continuous operation with rechargeable battery pack (HR-09) for HR-60, HR-120, & HR-200 only.

## Options for HR-60/120/200:

- \*HR-03 . Serial Interface (RS-232C/Current Loop)
- HR-05... 20mA Current Loop Interface
- HR-09... Rechargeable Battery Pack (NiMH)

**\*To order the Option HR-03 installed, add a "-C" to the end of the part number (Example HR-60-C)**

RS-232C is standard interface for HR-202i & HR-300i.

## Accessories and Options

- AD-1653.....Specific Gravity Measurement Kit
- AD-1683.....Static Eliminator
- AD-100-2.....Anti-Theft Device
- AD-8920.....External Display
- AD-8922.....Remote Controller
- HR-29.....Bluetooth Transmitter (30')
- CC:103E ....Carrying Case
- AD-1191.....Compact Printer
- AD-8118B ..Universal Printer
- AD-8121B ..Multi-Function Printer
- Calibration Weights
- WinCT Software

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