

A&D WEIGHING

# ANALYTICAL / SEMI-MICRO BALANCES



**A&D**  
A&D Weighing  
...Clearly a Better Value

# GEMINI™ SERIES

## Internal Calibration Mass with Large Breeze Break and Compact Footprint



**0.01 mg** • 0.01mg Semi-Micro Resolution



• Internal Calibration Standard



• Full Digital Calibration



• User Friendly Operation



• Liquid Crystal Display



• RS-232C Bi-directional Interface



• Windows Communication Tools Software



• GLP/GMP/GCP/ISO Compliance

**ID** • Balance ID Number



• Time and Date Function



• Data Memory Function



• Automatic Counting Accuracy Improvement



• Underhook Capability



• 5 Year Warranty

## Gemini Series Specifications

Capacity / Resolution		GR-120	GR-200	GR-300	GR-202
Gram	(g)	120X0.0001	210X0.0001	310X0.0001	210X0.0001 / 42X0.00001
	(mg)	120,000X0.1	210,000X0.1	310,000X0.1	210,000X0.1 / 42,000X0.01
Decimal Ounce	(oz)	4.2X0.00001	7.4X0.00001	10X0.00001	7.4X0.00001 / 1.4X0.000001
Troy Ounce	(ozt)	3.8X0.00001	6.7X0.00001	9.9X0.00001	6.7X0.00001 / 1.3X0.000001
Pennyweight	(dwt)	77X0.0001	135X0.0001	199X0.0001	135X0.0001 / 27X0.00001
Carat	(ct)	600X0.001	1050X0.001	1550X0.001	1050X0.001 / 210X0.0001
Momme	(mom)	32X0.0001	56X0.0001	82X0.0001	56X0.0001 / 11X0.00001
Grain Unit	(GN)	1851X0.002	3240X0.002	4784X0.002	3240X0.002 / 648X0.0002
Tola	(t)	10X0.00001	18X0.00001	26X0.00001	18X0.00001 / 3.6X0.000001
Tael	(TL)	3.1X0.00001	5.5X0.00001	8.2X0.00001	5.5X0.00001 / 1.1X0.000001
Percentage Min Div				0.01%	
Counting Min Weight				0.1 mg	
Linearity		±0.0002 g	±0.0002 g	±0.0002 g	±0.0002 / ±0.00003 g
Repeatability / Std Dev		0.0001 g	0.0001 g	0.0001 g	0.0001 / 0.00002 g
Stabilization Time			3.5 seconds		3.5 / 8 seconds
Sensitivity Drift (10°C – 30°C)				±2ppm / °C (10°C ~ 30°C / 50°F ~ 86°F)	
Display Refresh				5 times per second / 10 times per second	
Pan Size				Ø 85 mm / 3.3 inches	
Physical Dimensions	(mm)			249(W) x 330(D) x 327(H)	
	(in)			9.8(W) x 12.99(D) x 12.87(H)	
Breeze Break Dimensions	(mm)			178(W) x 160(D) x 233(H)	
	(in)			7.01(W) x 6.5(D) x 9.17(H)	
Operating Temperature				5°C ~ 40°C / 41°F ~ 104°F RH less than 85%	
Weight				Approximately 6.0 kg / 13.2 lb	
Power				100, 120, 220, 240 VAC (AC Adapter) 50 Hz / 60 Hz, 11VA	
Standard Accessories				Manual, AC Adapter, Reference Card	
Ext. Cal. Mass (optional)		50 g / 100 g	100 g / 200 g	200 g / 300 g	100 g / 200 g



•**0.01mg Semi-Micro Resolution** (some models).



•**Internal Calibration** Built-in motor driven calibration mass.



•**Full Digital Calibration** simplifies calibration by eliminating the need to continuously load and unload calibration weights to adjust Zero and Span.



•**User Friendly Operation** with large, clearly marked keys.



•**Liquid Crystal Display** with large, easy-to-read digits.



•**RS-232C Bi-directional Interface** for use with PC, Printer or Remote Display.



•**Windows Communication Tools Software** provides easy transmission of weighing data from A&D Balances and Scales to a computer using an RS-232C interface.



•**GLP/GMP/GCP/ISO Compliance** allows for GLP and LIMS balance management. The data can be output to an AD-8121B printer or a computer. Date, Time, Balance ID number, Serial number and Calibration data.



•**Balance ID Number** is user specified and stored when power is off.



•**Time and Date Function** complies with GLP and Interval Weighing in the Data Memory Function.



•**Data Memory Function** 200 PCS Weigh Data. (GH Models also offer choices of 100 PCS Weigh Data with T&D, or 50 Sets of Calibration Data).



•**Automatic Counting Accuracy Improvement** Ensures optimum count accuracy by continuous recalculation of average piece weight.



•**Auto Power On Function** Balance turns itself on when plugged in.



•**Underhook Capability** for Density Measurement and weighing of large or magnetic materials.

## Options and Accessories

**AD-8920A** Remote Display

**AD-8922A** Remote Controller

**AD-1653** Density Determination Kit

**AD-1682** Rechargeable Battery Pack (Ni-MH, external)

**AD-1683** Static Eliminator

**AD-1191** Compact Printer with Time & Date

**AD-8121B** Compact Printer with Time, Date and Statistics

**Win-CT** Data Collection Software

**AD-100-2** Anti-Theft Device

**HR-03** RS-232C output for HR models (Standard for HR-i, GR, GH)

**HR-05** 20mA Current Loop Interface; (HR-60, HR-120 & HR-200 only)

**HR-09** Rechargeable Battery Pack (internal, for HR-60, HR-120 & HR-200 only)



### AD-1683 Static Eliminator

The AD-1683 Static Eliminator is a small, high-voltage, DC-powered device which can eliminate static electricity from charged objects. The AD-1683 is compact, lightweight, and requires no high-voltage wiring.



### AD-8922A Remote Controller

The AD-8922A Remote Controller can be connected to specific A&D weighing instruments for display of weighing data and access to control functions.



Access Device	AD-8922A Key Functions					
	ON : OFF	CAL	SAMPLE	PRINT	MODE	RE-ZERO
GH, GP, GX, GX-K	Turns the display on and off	Calibrates using internal mass	Turns the minimum weighing value on and off <sup>1)</sup>	Output weighing data to an external device <sup>2)</sup>	Switches the weighing unit <sup>3)</sup>	Returns weighing value to zero (tare)
GR		—				
AD-4212, EK-H, GF, GF-K	—	—	—	—	—	—
HR, HR-i		—				
EK-i, EW-i	—	—	—	—	—	—
EK-G, EW-G, FC-i, FC-SI, FG, FP, FS, FS-KL, HV-G, HV-WP, HW-G, HW-WP	—	—	—	—	—	—

<sup>1)</sup> Excluding PCS and % mode. <sup>2)</sup> When the weighing machine is in stream mode, and AD-8922 is in key mode. <sup>3)</sup> Excluding AD-4212