

# *Analytical Semi-Micro Balances*



## ***GH-252***

250gx0.1mg  
101gx0.01mg

## ***GH-202***

220gx0.1mg  
51gx0.01mg

## ***GH-300***

320gx0.1mg

## ***GH-200***

220gx0.1mg

## ***GH-120***

120gx0.1mg

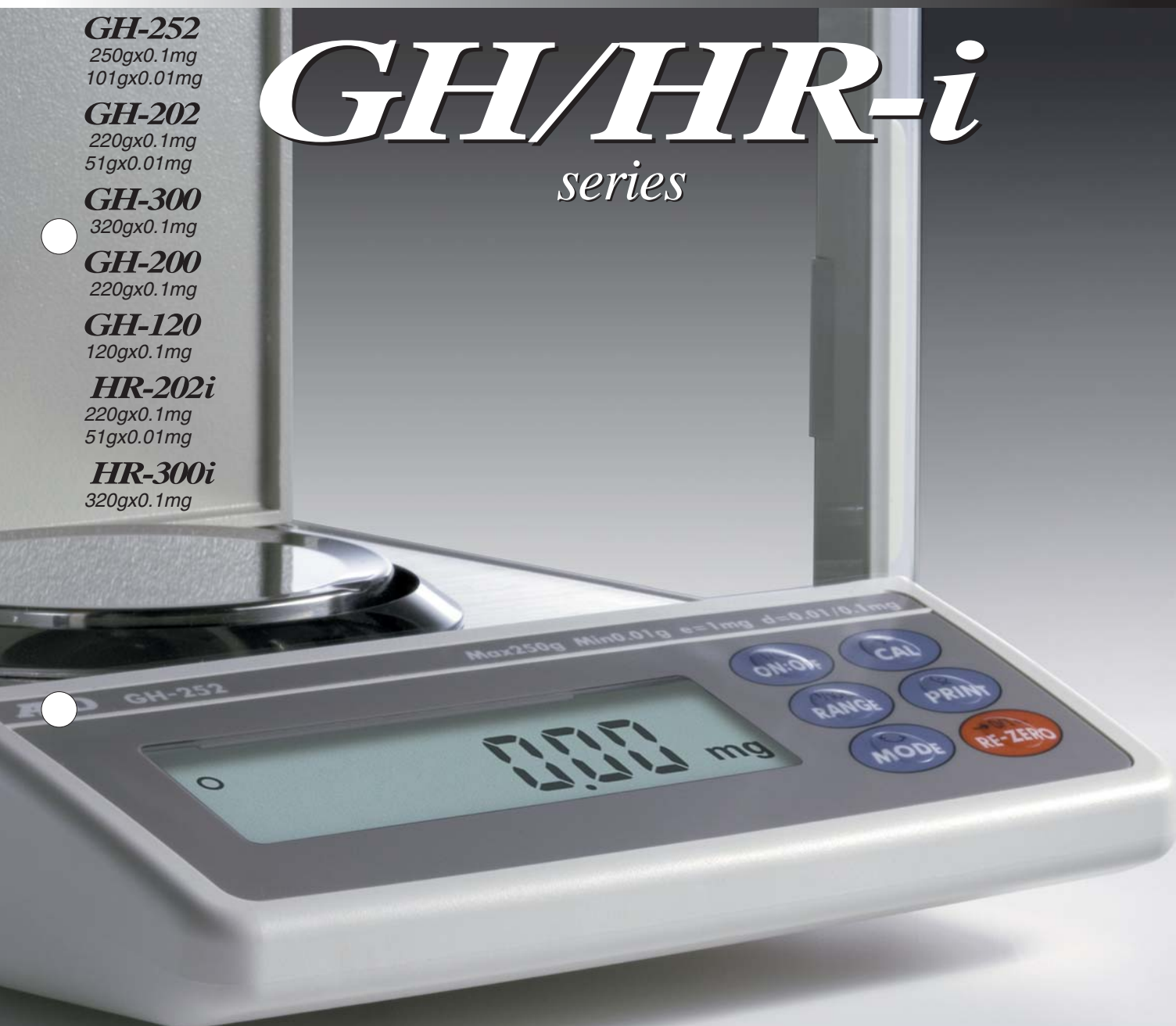
## ***HR-202i***

220gx0.1mg  
51gx0.01mg

## ***HR-300i***

320gx0.1mg

# ***GH/HR-i*** *series*



**A&D** ...Clearly a Better Value  
A&D Company, Limited

# **High Performance up to 101g (GH-252), 0.01mg Semi-Micro Weighing Automatic Self-Calibration (GH) and Ergonomic Design Ethernet interface (GH-08) with WinCT-Plus software makes data acquisition using multiple GH models possible expanding your Local Area Network System.**

## **Motor-driven Internal Calibration (GH models only)**

The GH internal calibration with an internal mass saves time and money. External calibration requires a great deal of skill, time and an expensive external mass. With our internal calibration with internal mass, the balance is calibrated very quickly.

### **Automatic Self Calibration (GH models only)**

Self-calibrates automatically when the balance detects ambient temperature changes.

### **One Touch Automatic Calibration (GH models only)**

Allows you to calibrate the balance on demand with just the push of a button.

## **Standard RS-232C**

Incorporates bi-directional communication with a PC, printer or other peripheral device.

## **Multiple Weighing Units**

Uses programmable or standard units of measurement: g, mg, PCS (with ACAI\* function), %, oz, ozt, ct, dwt, GN, tl, etc.

\*ACAI (Automatic Counting Accuracy Improvement)

## **Data Memory Function (GH models only)**

200 PCS Weighing data without date and time

100 PCS Weighing with date and time

50 PCS Calibration history data

## **GLP/GMP/GCP/ISO Compliance**

Allows GLP or LIMS balance management by outputting the Balance ID number and data used to calibrate the balance. This data can be output to A&D's AD-8121B printer or a computer, indicating date, time, Balance ID number, serial number and calibration data.

A & D	
MODEL	GH-300
S/N	01234567
ID	LAB-0123
DATE	2007/10/03
TIME	12:34:56
CALIBRATED<INT.>	
SIGNATURE	

## **ID Number**

The balance ID number can be set. It is used to identify the balance when GLP in use.

The ID number is memorized and maintained once it is fixed, even when the AC adapter is removed.

## **Auto Power On Function**

Plug in the unit and it turns itself on without having to press the ON/OFF key.

## **Time & Date (GH models only)**

Standard Time & Date Function complies with GLP and Interval Weighing in the Data Memory Function.

## **Interval Time Setting (GH models only)**

Weighing intervals of 2, 5, 10, 30 seconds and 1, 2, 5, 10 minutes in the Data Memory Function.

## **Standard Underhook**

Ideal for density determination and weighing magnetic substances.

## **Auto Re-Zero Function**

Re-zeroes automatically after data output.

## **Standard Windows Communication Tools Software**

A free copy of WinCT - A&D's powerful and flexible data collection software tool for virtually instant connection to a PC and a network of other devices.



# GH/HIR-i



## Quick USB Interface (GH-02)

Easy-to-use optional USB interface, with no driver or software installation necessary, for transfer of weighing data to a computer (Unidirectional communication from a balance to a PC only. Please use the standard RS-232C interface for sending commands from a PC to the balance.)

## Ethernet Interface (GH-08) with WinCT-Plus software (CD-ROM)

WinCT-Plus software makes it possible for the user to easily set up an IP address, subnet mask etc. The user can also send commands to control and acquire data from multiple GH balances.



## AD-1683 Static eliminator

The AD-1683 static eliminator, which incorporates a high-voltage power source, is a DC power-operated compact device which can eliminate static electricity from charged objects without the need of an external high-voltage power source. Since this static eliminator is compact and lightweight with no fan (no breeze is produced) and requires no high-voltage wiring, it is very easy to handle. It can generate ions very easily because it is a DC type.

### Accessories

AX-054016580-S Discharge Electrode Pin

		GH-252	GH-202	GH-300	GH-200	GH-120	HR-202i	HR-300i
Gram	(g)	250x0.0001/101x0.00001	220x0.0001/51x0.00001	320x0.0001	220x0.0001	120x0.0001	220x0.0001/51x0.00001	320x0.0001
	(mg)	250000x0.1/101000x0.01	220000x0.1/51000x0.01	320000x0.1	220000x0.1	120000x0.1	220000x0.1/51000x0.01	320000x0.1
Decimal Ounce (oz)		8.82x0.00001/3.56x0.000001	7.76x0.00001/1.80x0.000001	11.29x0.00001	7.76x0.00001	4.23x0.00001	7.76x0.00001/1.80x0.000001	11.29x0.00001
Troy Ounce (ozt)		8.04x0.00001/3.25x0.000001	7.07x0.00001/1.64x0.000001	10.29x0.00001	7.07x0.00001	3.86x0.00001	7.07x0.00001/1.64x0.000001	10.29x0.00001
Pennyweight (dwt)		160.8x0.0001/64.9x0.00001	141.5x0.0001/32.8x0.00001	205.8x0.0001	141.5x0.0001	77.2x0.0001	141.5x0.0001/32.8x0.00001	205.8x0.0001
Carat (ct)		1250x0.001/505x0.0001	1100x0.001/255x0.0001	1600x0.001	1100x0.001	600x0.001	1100x0.001/255x0.0001	1600x0.001
Momme (mom)		66.7x0.0001/26.9x0.00001	58.7x0.0001/13.6x0.00001	85.3x0.0001	58.7x0.0001	32.0x0.0001	58.7x0.0001/13.6x0.00001	85.3x0.0001
Grain Unit (GN)		3858x0.002/1559x0.0002	3395x0.002/787x0.0002	4938x0.002	3395x0.002	1852x0.002	3395x0.002/787x0.0002	4938x0.002
Tola (t)		21.43x0.00001/8.66x0.000001	18.86x0.00001/4.37x0.000001	27.44x0.00001	18.86x0.00001	10.29x0.00001	18.86x0.00001/4.37x0.000001	27.44x0.00001
Tael (TL)		6.67x0.00001/2.69x0.000001	5.87x0.00001/1.36x0.000001	8.53x0.00001	5.87x0.00001	3.20x0.00001	5.87x0.00001/1.36x0.000001	8.53x0.00001
Repeatability (Standard Deviation)		0.1mg / 0.03mg	0.1mg / 0.02mg	0.2mg	0.1mg	0.1mg	0.1mg / 0.02mg	0.2mg
Linearity		±0.2mg / ±0.10mg	±0.2mg / ±0.03mg	±0.3mg	±0.2mg	±0.2mg	±0.2mg / ±0.03mg	±0.3mg
Stabilization Time (typical at FAST)		Approx. 3.5 sec(0.1mg) / 8 sec(0.01mg)			Approx. 3.5 seconds		Approx. 3.5 sec(0.1mg) / 8 sec(0.01mg)	Approx. 3.5 seconds
Sensitivity Drift (10°C to 30°C)		±2ppm/°C (when automatic self calibration is not used)						
Operating Temperature		5°C to 40°C (41 F to 104 F),85%RH or less (no condensation)						
Display Type		Liquid Crystal Display (LCD)						
Display Refresh Rate		5 times/second or 10 times/second						
Counting Mode	Minimum unit mass	0.1mg						
	Number of samples	10, 25, 50 or 100 pieces						
Percent Mode	Minimum 100% reference mass	10.0mg						
	Minimum 100% display	0.01%, 0.1%, 1% (Depends on reference mass stored)						
Standard Serial I/F		RS-232C interface with Windows Communication Tools (WinCT : included as CD-ROM)						
Calibration Weights to be used for External Calibration		200g 100g 50g 20g		300g 200g 100g	200g 100g	100g 50g	200g 100g 50g 20g	300g 200g 100g
Weighing Pan		Ø90mm						
External Dimensions		217(W) x 442(D) x 316(H)mm						
Power		Confirm that the adapter type is correct for the local voltage and power receptacle (Approx. 11VA)						
Weight		Approx. 8.2kg(GH) / 7.9kg(HR-i)						
Standard Accessories		WinCT in CD-ROM, Manual, AC Adapter						

