![A&D Discover Precision logo]

TAKE WEIGHING **PRECISION** AND **PROTECTION** TO NEW HEIGHTS

Advanced Sensor Technology

Smart-SHS the latest advancement in our super hybrid design, construction & algorithms.
- Increased productivity via faster stabilization times (1 second in fast mode).
- Lower cost of ownership due to reduce number of parts and maintenance accessibility.

Innovative Solutions

Electronically Controlled Load (ECL) Initially does a self-diagnostic before performing an internal repeatability test without an external weight in < 1.5 minutes.
- *Dia-Check* is the diagnostic result that validates if the balance critically passes or fails.
- *SD* is standard deviation that allows for daily precision check ideal for S.O.P's
- *QuickMin-S* determines minimum sample weight in any given environment.
- *Min-S Alert* **–** Alerts user to ensures they are operating within USP41 compliance.

Impact Shock Detection (ISD)
- *Impact-Alert* visually & audible indicates the magnitudes of impact shocks.
- *Shock-log* documents date, time, and shock level.

Flow Rate Display (FRD) streamline & improve filling or dosing accuracy & precision.
- *FR-Cal* calculates, displays/outputs the mass or volume flow rate by entering density.
- *FR-Compare* is a comparator which provides feedback if the flow rate is within limits.
- *FR-Secure* stores tare values in our non-volatile memory if application was disrupted.

Good Data Management

- **External Calibration** easy one touch button performs & document external calibration.
- **Universal Flexi Coms** (UFC) edit serial data output making label printing possible.
- **Password-Protect** offers password-protection up to 11 users and 1 administrator.
- **GLP/GMP/GCP Compliance** outputs manufacturer, model, serial number, ID, date, time, signature for full calibration report.

Practical Features

Leveling Made Easy
- Level me prompt, turn on, screen blinks for 5 seconds to prompt user to level.
- *Bright-bubble* – Large, easy-to-see, front mounted spirit level with LED Illumination.
- *Fly-thumbwheel* is effortless & accessible allows ergonomic adjustment with anti-slip feet.

Simple User Interface
- *Six straightforward keys* – ON/OFF, CAL, MODE, SAMPLE, PRINT, REZERO.
- *Reverse Backlit LCD* is a large display with great B&W contrast provides excellent visibility.

Cleanable Robust Construction
- *Stainless Steel Pan & Dust-plate* can be easily removed for cleaning.
- *"Click & Lift"* detachable chamber & collapsible side doors that save on space.
- *Die-cast Aluminum* housing provides extra stability and durability.

Flexible Interface & Security
- *Standard RS-232C & USB* – Toggle between the Quick USB mode or Virtual COM mode (bi-directional). A USB cable comes standard.
- *Security Slot* – Anti-theft lock (such as Kensington) to prevent loss.

KEY FEATURES:

SHS — Super Hybrid Sensor	Super Hybrid Sensor
External Calibration	GF-A External Calibration
Electronically Controlled Load	ECL Electronically Controlled Load
Impact Shock Detection	ISD Impact Shock Detection
Flow Rate Display	FRD Flow Rate Display
RS-232C Interface	RS-232C
UFC Ticket Formatting	Universal Flexi Coms
User Access Control	Password Protect

Specifications

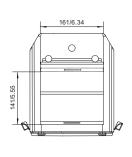|		GF-124A	GF-224A	GF-324A
Capacity		122 g	220 g	320 g
Readability		0.0001 g		
Repeatability (std. deviation)		0.0001 g		0.0002 g (300 g) 0.0001 g (200 g)
Minimum weight[1] (typical)		120 mg		
Linearity		±0.0002 g		±0.0003 g
Stabilization Time (when set to FAST under a good environment)		Approx. 1.5 sec (100 g)	Approx. 2 sec (200 g) Approx. 1.5 sec (100 g)	Approx. 2 sec (300 g) Approx. 1.5 sec (100 g)
Sensitivity drift		±2 ppm/°C (10 to 30 °C/50 to 86 °F, when automatic self calibration is OFF)		
Operating environment		5 to 40 °C (41 to 104 °F), 85%RH or less (no condensation)		
Display refresh rate		5 times/sec, 10 times/sec or 20 times/sec		
Units of measure[2]		mg (milligram), g (gram), oz (ounce), ozt (troy ounce), ct (metric carat), mom (momme), dwt (pennyweight), gr (grain), pcs (counting mode), % (percent mode), SG (density mode), and a user-programmable unit		
Counting mode	Minimum unit mass	0.0001 g		
	Number of samples	5, 10, 25, 50 or 100 pieces		
Percent mode	Minimum 100% reference mass	0.0100 g		
	% readability	0.01%, 0.1% or 1% (depends on the reference mass stored)		
Communication interface		RS-232C and USB		
Applicable calibration weight value		50 g 100 g	50 g 100 g 200 g	50 g 100 g 200 g 300 g
Weighing pan size		Ø90 mm		
External dimensions		259 (W) × 358 (D) × 332 (H) mm (including the large glass breeze break)		
Net weight		Approx. 7 kg		
Power supply / consumption		AC adapter / approx. 30 VA		

1 Under stable environment (no rapid temperature/humidity change, vibration, draft, magnetism, static, etc). The mass of the internal weight may vary with age.
2 One additional unit from tael (Singapore/HK jewelry/Taiwan/China), tola or Newton can be added upon request.
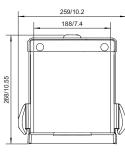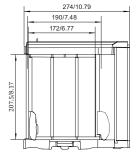
Dimensions (mm/inch)

Models with readability of 0.0001g

A&D Weighing