The new contender in the industrial balance field
The GP Series incorporates our enhanced weighing sensor, the Double Leveraged Super Hybrid Sensor (SHS). Building on the basic SHS features of speed and stabilization, our enhanced SHS technology brings the most accurate weighing results to industrial balances in the 12kg to 101kg capacities class.

Internal Calibration

The GP 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 — Self-calibrates automatically when the balance detects ambient temperature changes.
- One Touch Automatic Calibration — Allows you to calibrate the balance on demand with just the push of a button.
- Calibration is essential for accuracy in weighing. For example, in high resolution balances, changes in sensitivity drift can be caused by changes in the ambient temperature. Take the GP-30K for example, the weight might change by 0.9g with a change of 10°C (Sample’s weight: 30kg).
- Thanks to our Double Leveraged Super Hybrid Sensor, the GP’s motor-driven internal calibration mass is equivalent to a 50kg calibration mass in terms of top loading capacity on the weighing pan. The adjusted weighing accuracy is within ±15 digits in relation to the weighing capacity while conforming to the OIML’s Class II balances definitions after using GP’s internal calibration mass.

Standard WinCT

WinCT (Windows Communication Tools Software), provides easy transmission of weighing data from A&D balances to a computer using the RS-232C interface. Speed of data transfer into Windows applications in a manageable format is limited only by the computer’s capabilities.

RS-232C Interface

Using a USB/RS-232C Converter, you can transfer data between a USB-equipped PC and a GP balance. This also makes your GP balance hot-swappable meaning that there is no need to turn the balance and/or computer off before disconnecting the balance.
**User-Friendly Industrial Scales**

### GP-S

**with detached display unit**

- **GP-30KS** — (31kg/0.1g)
- **GP-32KS** — (6.1kg/0.1g* · 31kg/1g)
- **GP-60KS** — (61kg/1g)
- **GP-61KS** — (61kg/0.1g)
- **GP-100KS** — (101kg/1g)

### GP Series

**with Swing Arm display type**

- **GP-12K** (12kg/0.1g)  
  **GP-60K** (61kg/1g)
- **GP-20K** (21kg/0.1g)  
  **GP-61K** (61kg/0.1g)
- **GP-30K** (31kg/0.1g)  
  **GP-100K** (101kg/1g)
- **GP-32K** (6.1kg/0.1g* · 31kg/1g)  
  **GP-102K** (61kg/1g* · 101kg/10g)
- **GP-40K** (41kg/0.5g)

*SmartRange*

The GP-32K/VS and GP-102K have both precision and standard ranges. The precision range has a higher resolution and the standard one has a normal resolution. Pressing the RE-ZERO key allows weighing in the precision range, regardless of the tare value. The **SmartRange** function enables you to weigh or add samples in the precision range without removing the container and/or those objects that have been placed on the pan.
Industrial Balances...

Clear & Large VFD Display

Easy to see—even in the dark / Wide angle view prevents mistakes

Compliant with IP65 (resistant to dust, water and moisture)

Swing Arm Display

Animal Weighing Mode allows you to quickly and accurately determine the weight of any live or unstable subject. Optional animal weighing pan (GP-12) is available.

Automatic Adjustment Environment Setting automatically adapts to the most suitable environment. Response setting with one-touch key operation. The response annunciator displays "FAST", "MID", and "SLOW."

Manual Response Adjustment can be set by pressing the MODE key and response speed can be adjusted to FAST, MID or SLOW.

Automatic Counting Accuracy Improvement (ACAI) is a novel and useful approach to ensuring the utmost in performance when counting even the smallest of items. ACAI automatically updates and refines the average piece weight used to determine the total quantity.

Percentage Function facilitates an effective and quick comparison of a sample or commodity against a known reference mass. Simply place an object on the pan to register its weight as 100%. Place another object on the pan to compare its weight in percentage mode.

Overall Capacity Indication is a unique and helpful feature. By indicating how much of the balance's capacity has been filled, the risk of overloading the balance is minimized.

Standard Comparator Function offers increased flexibility and compatibility for a vast number of applications. You can input a target weight and weigh heavier or lighter items using either the keyboard or by placing samples on the pan. HI, OK or LO will be indicated on the display to show the comparison results.
**IP-65 Splash Proof Keyboard, Display and Base Units**

Balances protected from dust and spills up to IP65 level.

**GLP/GMP/ISO Compliance**

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

**Standard RS-232C**

Bi-directional communication with a PC or direct connection to a printer.

**Commands**

A PC can control the balance by sending commands to the balance:
- Command to query weighing data
- Command to control the balance
- Command to control the memory function
- Command to control the comparator function

**ID Number**

The balance ID number can be set. It is used to identify the balance when GLP is used. The ID number is memorized and maintained once it is fixed, even if the AC adapter is removed.

**Optional Underhook**

Ideal for density determination and weighing magnetic substances
- GP-20 Underhook for GP-12K/20K/30K/32K/40K/60K/61K/30KS/32KS
- GP-21 Underhook for GP-60K/61K/100K/102K/60KS/61KS/100KS

**Density Determination of a Solid Object**

The GP has a density determination mode, which is available after changing the internal parameter settings. Once the object’s weight in the air, in liquid and the liquid density are input, the solid density will be calculated. It is useful to determine concrete’s density.

**Enlargement Indication of HI, OK, LO Symbols**

Press the MODE key during usual HI, OK or LO indication to switch the display from $3.0000kg$ to $HI$ kg. The letters (HI, for example) can be enlarged.

**Accumulation of Weighing Results**

GP can accumulate the weighing results and then display and output them.

**Data Memory**

Format the data memory function for:
- 200 sets of weighing data
- 100 sets of weighing data with Time & Date
- 20 sets of Tare values
- 50 sets of GLP data—Time & Date, Calibration data, ID number and Serial number
- 50 sets of Unit weight for Counting mode
- 20 sets of comparator Upper & Lower limits

**Time & Date**

Standard Time & Date function complies with GLP and Interval weighing in the Data memory function.

**Auto Self Checking**

Automatically and independently checks when setting the Automatic adjustment environment.

**Interval Time Setting**

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

**Auto Re-Zero**

Re-Zeros automatically after data output.

**Large Stainless Steel Weighing Pan**

384mm x 344mm for GP-12K/20K/30K/32K/40K/60K/61K/30KS/32KS
386mm x 346mm for GP-100K/102K/100KS

**Multiple Weighing Units & Programmable Unit**

Uses programmable or standard units of measurement (g, kg, lb, OZ, ct, dwt, OZt, mom, TL, MS, tola and DS)

**Air Bubble Leveling**

Easy to adjust the level of the balance.

**SmartRange**

For more accurate weighing, SmartRange function is provided on the GP-32K/GP-32KS (6.1kg x 0.1g/31kg x 1g) and GP-102K (61kg x 1g/101kg x 10g).

**Built-In Internal Calibration Mass**

The GP has a built-in internal calibration mass. Internal calibration mass is equivalent to a 50kg calibration mass in terms of top loading capacity on the weighing pan.

**Display Auto Power OFF**

Display turns off after 10 minutes of inactivity, which can be disabled when not needed.

**Auto Power ON**

Plug it in and it turns ON without pressing the ON/OFF key.
### Specifications

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<thead>
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</thead>
<tbody>
<tr>
<td>Weighting Capacity</td>
<td>12kg</td>
<td>21kg</td>
<td>31kg</td>
<td>31kg</td>
<td>61kg</td>
<td>61kg</td>
<td>101kg</td>
<td>101kg/61kg</td>
<td></td>
</tr>
<tr>
<td>Resolution</td>
<td>0.1g</td>
<td>0.1g</td>
<td>0.5g</td>
<td>0.5g</td>
<td>1g</td>
<td>1g</td>
<td>1g</td>
<td>1g</td>
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<tr>
<td>Repeatability (Standard Deviation)</td>
<td>±0.2g</td>
<td>±0.2g</td>
<td>±0.5g</td>
<td>±0.5g</td>
<td>±2g</td>
<td>±2g</td>
<td>±10g/±2g</td>
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<tr>
<td>Linearity</td>
<td>±1g/±0.2g</td>
<td>±1g/±0.2g</td>
<td>±1g</td>
<td>±1g</td>
<td>±2g</td>
<td>±2g</td>
<td>±10g/±2g</td>
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<tr>
<td>Stabilization Time</td>
<td>1.5 seconds (TYP at FAST mode)</td>
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<tr>
<td>Accuracy just calibrated by internal mass</td>
<td>±1.0g</td>
<td>±1.0g</td>
<td>±1.0g</td>
<td>±1.0g</td>
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<tr>
<td>Sensitivity Drift (10˚C-30˚C/50˚F-86˚F)</td>
<td>±3ppm/˚C</td>
<td>±5ppm/˚C</td>
<td>±5ppm/˚C</td>
<td>±5ppm/˚C</td>
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<tr>
<td>Operating Temperature</td>
<td>5˚C to 40˚C (41˚F to 104˚F), 85% RH or less (No condensation)</td>
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<tr>
<td>Sensing Method</td>
<td>Super Hybrid Sensor (SHS)</td>
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<tr>
<td>Display Type</td>
<td>Vacuum fluorescent display (VFD)</td>
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<tr>
<td>Display Refresh Rates</td>
<td>5 times/second or 10 times/second</td>
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<tr>
<td>Weighing Units and Modes</td>
<td>g, lb, OZ, OZ, ct, dwt, oz, mom, TL, MS, tola, DS and % and counting PCS [Weighing units g, ct, and dwt are not available on GP-102K]</td>
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<tr>
<td>Counting Mode</td>
<td>Minimum unit mass</td>
<td></td>
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<tr>
<td>Number of samples</td>
<td>10, 25, 50 or 100 pieces</td>
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<tr>
<td>Percent Mode</td>
<td>Min. 100% reference mass</td>
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<tr>
<td>Minimal display</td>
<td>0.01%, 0.1%, 1% (automatically switches depending on the reference mass stored)</td>
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<tr>
<td>Standard Interface</td>
<td>RS-232C serial interface with Windows Communication Tools (WinCT)</td>
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</tbody>
</table>
| Recommended External Calibrating Weight | 5kg
| 10kg
| 20kg
| 30kg |
| 50kg |
| 100g |
| 200g |
| 500g |
| 1000g |
| Water & Dustproof Level | Complies with IP-65 (International protect), covers the entire apparatus |
| Weighing Pan | Stainless steel weighing pan (wash down type) |
| Calibration | Motor driven internal calibration mass with SHS |
| External Dimensions | 372(W)x615(D)x130(H)mm |
| 373(W)x615(D)x130(H)mm (Note: GP-30KS is 344(W)x442(D)x130(H)mm) |
| AC Adaptor | Approximately 14VA (supplied by AC adaptor) |
| Power Consumption | Approximately 17kg |
| Net Weight | Approximately 18kg |

### Options

- **GP-04:** Comparator Output (Relay with Buzzer) / RS-232C / Current Loop
- **GP-06:** Analog/Current Loop Output
- **GP-07:** 5-meter Connection Cable (factory option)
  (For GP-30KS/32KS/60KS/61KS & GP-100KS)
- **GP-12:** Animal Weighing Pan (288 x 360 x 317mm)
- **GP-20:** Underhook
  (For GP-12K/20K/30K/32K/40K/30KS and GP-32KS)
- **GP-21:** Underhook
  (For GP-60K/100K/102K and GP-100KS)
- **GP-22:** AD-8121B Printer Support

### Accessories

- **AX-K01710-200:** RS-232C cable (25P-9P)
- **AX-SW-128:** Foot Switch

### Peripherals (sold separately)

- **AD-1682:** Rechargeable Battery Unit
- **AD-8118:** Universal Printer
- **AD-8121B:** Dot Matrix Compact Printer
- **AD-8526:** Ethernet Converter
- **AD-8920:** Remote Display
- **AD-8922:** Remote Controller

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**AD-8121B:** Dot Matrix Compact Printer

Specifications subject to change for improvement without notice.