

## A&D Weighing Orion HR Series

Analytical Balances



### STANDARD FEATURES

- Simple and easy to operate
- GLP software which outputs the calibration data and ID number of the balance for calibration confirmation to the AD-8121B printer
- Adapts to your environment
- 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. Standart for HR-300i & HR-202i)
- Underhook capability for density measurement and weighing magnetic materials

### SPECIFICATIONS

#### OVERALL DIMENSIONS:

HR-60, HR-120, HR-200: 8.4in x 12.6in x 11.9in  
HR-202i, HR-300i: 8.54in x 17.4in x 12.24in

#### DISPLAY REFRESH:

Five times per second (stable) /  
10 times per second (unstable)

#### OPERATING TEMPERATURE:

41°F to 104°F (5°C to 40°C) RH < 85%

#### REPEATABILITY/STD. DEV:

HR-60, HR-120, HR-200: 0.0001 g  
HR-202i: 0.0001/0.00002 g  
HR-300i: 0.0002 g

#### LINEARITY:

HR-60, HR-120, HR-200:  $\pm 0.0002$  g  
HR-202i:  $\pm 0.0002$  g/ $\pm 0.0003$  g  
HR-300i:  $\pm 0.00003$  g

#### SENSITIVITY DRIFT (PPM/°C/ SPAN):

$\pm 2$  ppm when automatic self calibration  
is not used

#### PAN SIZE:

HR-60, HR-120, HR-200: 3.3in/85mm  
HR-202i, HR-300i: 3.6in/90mm

#### WEIGHT:

HR-60, HR-120, HR-200: 12.5lb/5.7kg  
HR-202i, HR-300i: 17.6lb/8.0kg

#### POWER:

\*100, 120, 220, 240VAC (AC adapter)  
50Hz/60Hz

#### CALIBRATION MASS:

HR-60: 50g  
HR-120: 100g  
HR-200: 200g  
HR-202i: 20/50/100/200g  
HR-300i: 100/200/300g

#### WARRANTY:

Five-year limited warranty

Note: Orion HR series does have internal calibration

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

### HR SERIES CAPACITIES

	HR-60	HR-120	HR-200	HR-202i	HR-300i
<b>g</b>	60 x 0.0001	120 x 0.0001	210 x 0.0001	220 x 0.0001	320 x 0.0001
<b>mg</b>	60000 x 0.1	120000 x 0.1	210000 x 0.1	220000 x 0.1	320000 x 0.1
<b>oz</b>	2.1 x 0.000005	4.2 x 0.00005	7.4 x 0.000005	7.76 x 0.00001	11.29 x 0.00001
<b>ozt</b>	1.9 x 0.000005	3.8 x 0.000005	6.7 x 0.000005	7.07 x 0.00001	10.3 x 0.00001
<b>dwt</b>	38 x 0.0001	77 x 0.0001	135 x 0.0001	141.5 x 0.0001	199 x 0.0001
<b>ct</b>	300 x 0.001	600 x 0.001	1050 x 0.001	1100 x 0.001	1550 x 0.001
<b>mm</b>	16 x 0.00005	32 x 0.00005	56 x 0.00005	58.7 x 0.0001	82 x 0.0001
<b>GN</b>	925 x 0.002	1851 x 0.002	3240 x 0.002	3395 x 0.002	4784 x 0.002
<b>t (Tola)</b>	5 x 0.00001	10 x 0.00001	18 x 0.00001	18.1 x 0.00001	26 x 0.00001
<b>TL (Tael)</b>	1.5 x 0.000005	3.1 x 0.000005	5.5 x 0.000005	5.87 x 0.00001	8.2 x 0.00001