

## Specifications

HJ-XXXCE stands for EC type approval models.

| Model<br>with EC approval | HJ-220E<br>HJ-220CE                                                                       | HJ-320E<br>HJ-320CE | HJ-420E<br>HJ-420CE | HJ-620E<br>HJ-620CE | HJ-1200E<br>HJ-1200CE | HJ-2200E<br>HJ-2200CE | HJ-2200E<br>HJ-2200CE | HJ-4200E<br>HJ-4200CE | HJ-6200E<br>HJ-6200CE |
|---------------------------|-------------------------------------------------------------------------------------------|---------------------|---------------------|---------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Capacity                  | 220g                                                                                      | 320g                | 420g                | 620g                | 1200g                 | 2200g                 | 3200g                 | 4200g                 | 6200g                 |
| Readability               | 0.001g                                                                                    |                     |                     |                     | 0.01g                 |                       |                       |                       |                       |
| Repeatability(s)          | 0.001g                                                                                    |                     |                     |                     | 0.01g                 |                       |                       |                       |                       |
| Non-Linearity(typ.)       | ±0.001g                                                                                   |                     |                     |                     | ±0.01g                |                       |                       |                       |                       |
| Pan size                  | 120×140mm                                                                                 |                     |                     |                     | 200×200mm             |                       |                       |                       |                       |
| Dimensions(LWH)           | 333×220×186mm (including windshield)                                                      |                     |                     |                     | 333×220×88mm          |                       |                       |                       |                       |
| Weight units*1            | g, ct, oz, lb, ozt, dwt, GN, t(Hong Kong), t(Taiwan), t(Singapore, Malaysia), momme, tola |                     |                     |                     |                       |                       |                       |                       |                       |
| Calibration               | With external weight                                                                      |                     |                     |                     |                       |                       |                       |                       |                       |
| Weight                    | Approx. 3.5kg                                                                             |                     |                     |                     | Approx. 4.0kg         |                       |                       |                       |                       |

| Model<br>with EC approval | HJ-8200E<br>HJ-8200CE                                                                    | HJ-10KE | HJ-12KE<br>HJ-12KCE | HJ-15KE<br>HJ-15KCE | HJ-21KE<br>HJ-21KCE |
|---------------------------|------------------------------------------------------------------------------------------|---------|---------------------|---------------------|---------------------|
| Capacity                  | 8200g                                                                                    | 10000g  | 12000g              | 15000g              | 21000g              |
| Readability               | 0.1g                                                                                     | 0.05g   | 0.1g                |                     | 0.1g                |
| Repeatability(s)          | 0.1g                                                                                     | 0.05g   | 0.1g                |                     | 0.1g                |
| Non-Linearity(typ.)       | ±0.1g                                                                                    | ±0.05g  | ±0.1g               |                     | ±0.1g               |
| Pan size                  | 200×200mm                                                                                |         | 200×200mm           |                     | 220×250mm           |
| Dimensions(LWH)           | 330×220×88mm                                                                             |         | 330×220×88mm        |                     | 330×260×112mm       |
| Weight units*1            | g, ct, oz, lb, oz, dwt, GN, t(Hong Kong), t(Taiwan), t(Singapore, Malaysia), momme, tola |         |                     |                     |                     |
| Calibration               | With external weight                                                                     |         |                     |                     |                     |
| Weight                    | Approx. 4.0kg                                                                            |         |                     |                     | Approx. 8.5kg       |

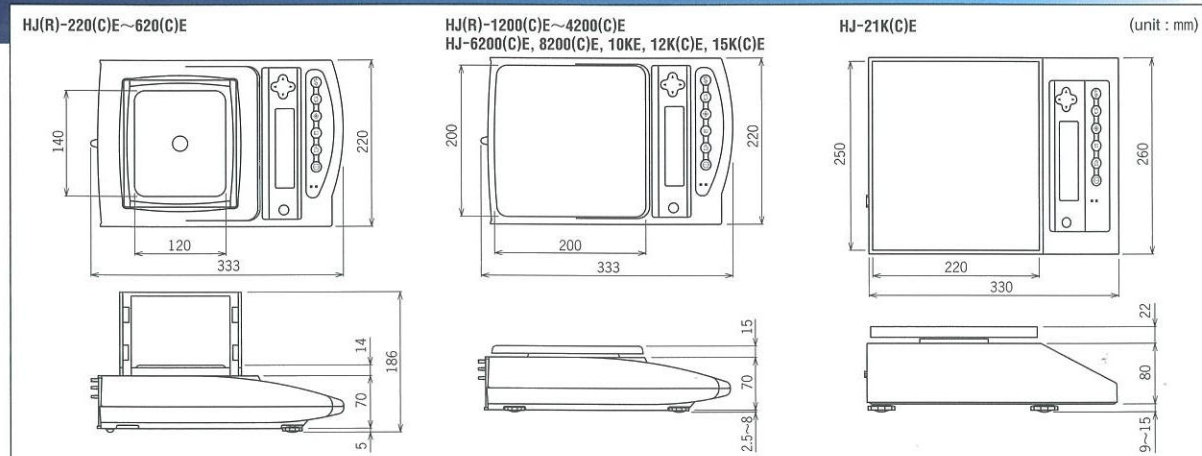
### Common Specification

Power source: AC120/230V DC12V  
Output: RS-232C 2outputs  
Measuring system: Tuning-fork frequency sensing (MMTS)  
Tare: Full weighing range  
Display: Fluorescent display  
Modes: weighing, counting, percentage, unit converting\*2, density  
\*2: unit converting is not available in HJ(R)-CE models.

| Model<br>with EC approval  | HJR-220E<br>HJR-220CE                                                                    | HJR-320E<br>HJR-320CE | HJR-420E<br>HJR-420CE | HJR-620E<br>HJR-620CE | HJR-1200E<br>HJR-1200CE | HJR-2200E<br>HJR-2200CE | HJR-3200E<br>HJR-3200CE | HJR-4200E<br>HJR-4200CE |
|----------------------------|------------------------------------------------------------------------------------------|-----------------------|-----------------------|-----------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| Capacity                   | 220g                                                                                     | 320g                  | 420g                  | 620g                  | 1200g                   | 2200g                   | 3200g                   | 4200g                   |
| Readability                | 0.001g                                                                                   |                       |                       |                       | 0.01g                   |                         |                         |                         |
| Repeatability(s)           | 0.001g                                                                                   |                       |                       |                       | 0.01g                   |                         |                         |                         |
| Non-Linearity(typ.)        | ±0.001g                                                                                  |                       |                       |                       | ±0.01g                  |                         |                         |                         |
| Pan size                   | 120×140mm                                                                                |                       |                       |                       | 200×200mm               |                         |                         |                         |
| Dimensions(LWH)            | 333×220×186mm (including windshield)                                                     |                       |                       |                       | 333×220×88mm            |                         |                         |                         |
| Weight units <sup>*1</sup> | g, ct, oz, lb, oz, dwt, GN, t(Hong Kong), t(Taiwan), t(Singapore, Malaysia), momme, tola |                       |                       |                       |                         |                         |                         |                         |
| Calibration                | With built-in weight and external weight                                                 |                       |                       |                       |                         |                         |                         |                         |
| Weight                     | Approx. 4.5kg                                                                            |                       |                       |                       | Approx. 5.8kg           |                         |                         |                         |

\*1: only g, kg & carat are available in HJ(R)-CE models.

## Dimensions



## Options & Peripherals

|                                  |                                                 |                                         |
|----------------------------------|-------------------------------------------------|-----------------------------------------|
| HJBT : Rechargeable battery unit | HJLM : Relay contact                            | HJUH : Under weighing hook              |
| HJBZ : Buzzer output             | HJR4 : RS-422A output                           | HJDK : Density measurement kit          |
|                                  | HJFP : Full pack set with buzzer, relay contact | HJWL : Large windshield (199×198×238mm) |

The contents of this catalogue are subject to change due to modifications and/or other reasons.

## SHINKO DENSHI CO., LTD.

3-9-11 YUSHIMA, BUNKYO-KU, TOKYO 113-0034  
TEL : 81-3-3835-4577 FAX : 81-3-5818-6066  
URL : <http://www.vibra.co.jp> E-mail : [info@vibra.co.jp](mailto:info@vibra.co.jp)

●Distributed by:

**VIBRA®**  
Measure the Future

# PRECISION TUNING-FORK BALANCE HJ/HJR series



SHINKO DENSHI CO., LTD.



JQA-2834 TSUKUBA JQA-EMS309



# HJ/HJR series

## TOUGH & INTELLIGENT



HJ(R)-220(C)E~620(C)E



HJ(R)-1200(C)E~4200(C)E  
HJ-6200(C)E, 8200(C)E  
HJ-10KE, 12K(C)E, 15K(C)E



HJ-21K(C)E

**Precision Tuning-fork Balance with  
full of capacity and readability range!**

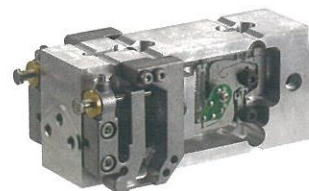
**Strongly built housing!  
Best solution for your every needs!**

### Extra-Large weighing pan

Large square weighing pan for all capacities  
120×140mm for HJ(R)220(C)E~620(C)E.....0.001g resolution  
200×200mm for HJ(R)-1200(C)E~15K(C)E ....0.01g and 0.1g resolution  
220×250mm for HJ-21K(C)E.....0.1g resolution

### Equipped with latest MMTS for 1/620,000 resolution

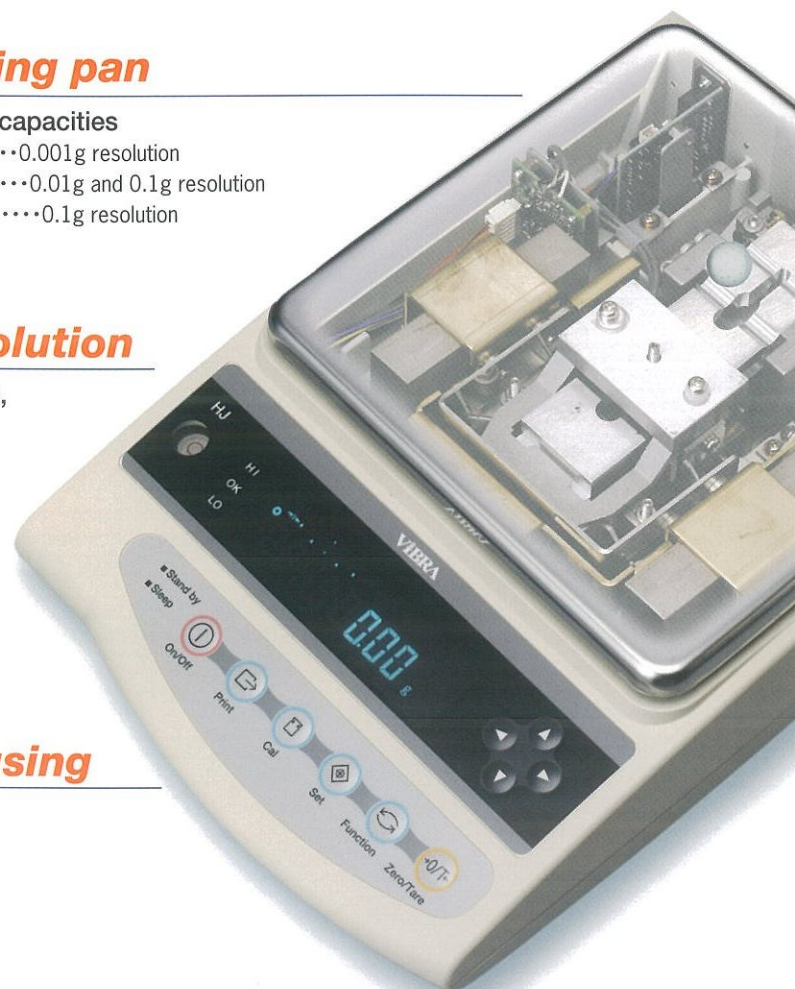
Mono-Metal Tuning-fork Sensor provides quick response,  
Long-term stability and high resolution.



MMTS  
5-Year  
Warranty

### Very tough! Aluminum alloy die casting housing

Aluminum alloy die casting housing resistant to  
external shock, pharmaceutical and chemical materials.



### User friendly, simple operation!

Large fluorescent display highly visible in all lighting conditions  
Direction keys for easy function setting



#### Direction key

Easy function setting by the 4 direc-  
tion keys



#### Bar graph display

A 20-step bar graph display  
Easily check the current load's weight  
against the capacity



#### One touch automatic calibration (HJR type only)

Just one touch of the CAL key to  
calibrate the balance with motor-  
driven built-in weight  
Easy maintenance to keep the bal-  
ance always in good condition

### Multi-mode & multi-function to meet your every needs!

4 functions (standard display, accumulating, comparator and accumulating + comparator)  
in 4modes (weighing, counting, percent, unit-converting) plus density measurement



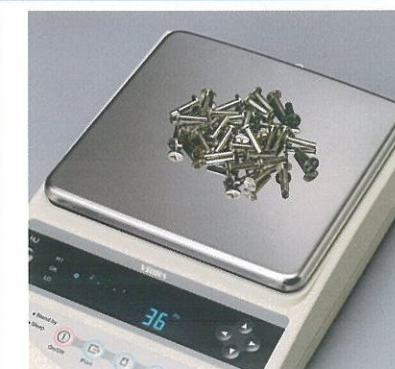
#### Draft windshield as standard

Draft windshield provided as stan-  
dard (0.001g readability)  
Taller windshield can be provided  
as option (199×198×238mm)



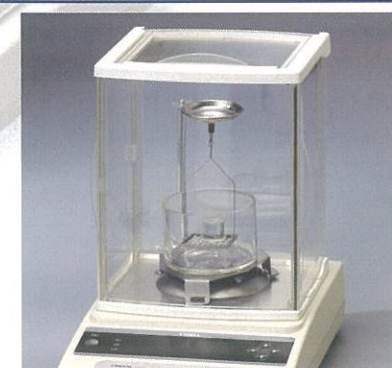
#### Comparator function

Easily judge a weight based on the  
limit value user has stored in the  
balance



#### Industrial scene

Accurate counting & percentage  
mode with high internal resolution



#### Density determination mode

Measure the density of solids and  
liquids with density measurement  
kit\* \*option



#### Connection to PC, etc

RS232C interface equipped as  
standard to connect to PC, printer  
and other outside devices

```

**CALIBRATION**
DATE:2006.08.03
TIME: 09:37
SHINKO DENSHI
TYPE:
HJR-420
S/N: 5096
ID:
CAL. INTERNAL
REF:
0420.000 g
    
```

#### ISO/GLP compliant printing record

Record and print calibration pro-  
cedures and result with an opera-  
tional printer