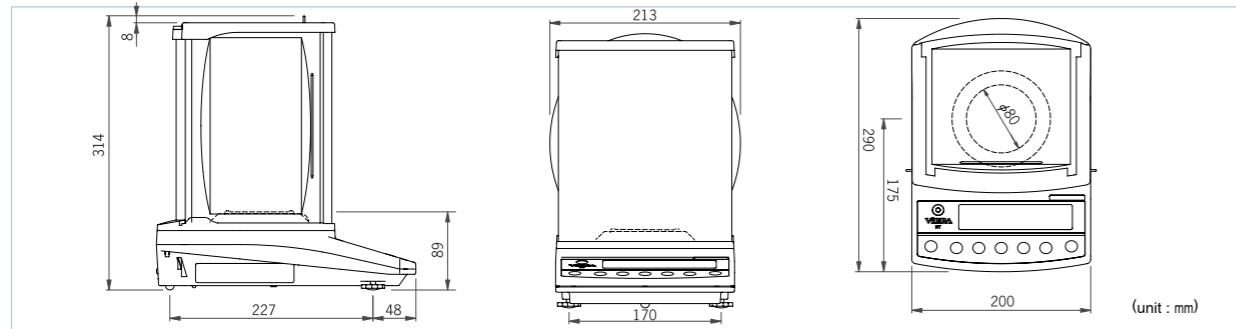


Technical Specifications

Model	HT-220E	HTR-220E
Capacity	220g	220g
Readability	0.0001g	0.0001g
Repeatability (σ)	0.0001g	0.0001g
Linearity	± 0.0003g	± 0.0003g
Pan size	Ø 80mm	
Dimensions	200 x 290 x 314mm(WxDxH)	
Weighing units	mg, g, ct,	
Power source	AC230V DC9V	
Output	RS-232C and peripheral device output	
Measuring system	Tuning-Fork Frequency Sensing	
Tare	Full weighing range	
Calibration	by external weight	by built-in weight
Display	LCD with backlit	
Modes	weighing, counting, percentage, unit conversion density	
Weight	Approx. 2.9kg	

Dimensions

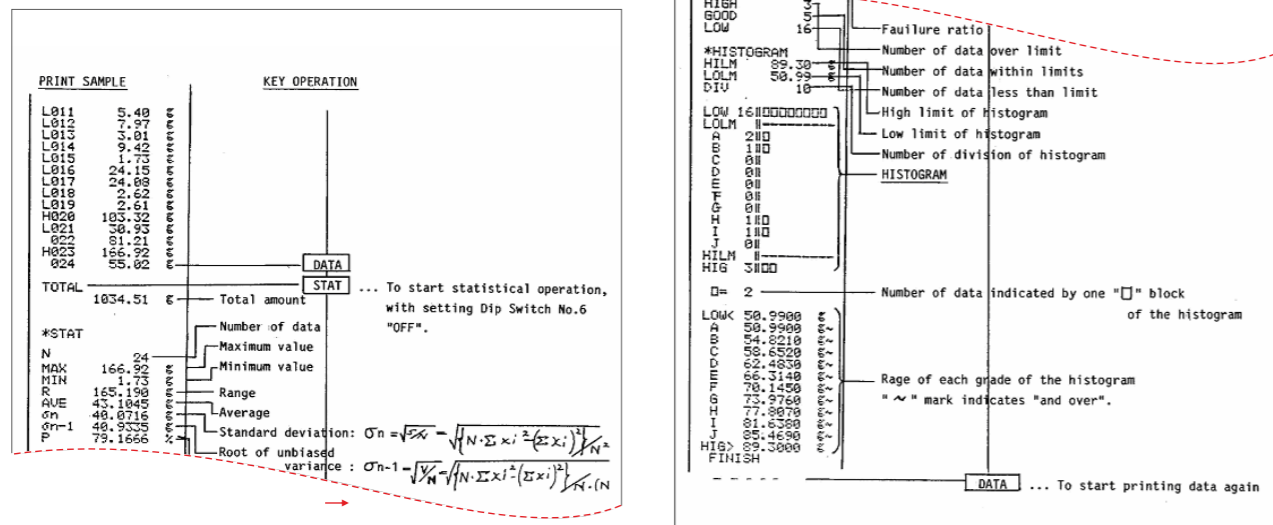


CSP 160 Printer



Options and Peripherals

- Density measurement kit
- CSP-160: Operation micro-printer  
Able to print number of data, average, maximum, minimum, std deviation, failure ratio range, total & histogram.



Manufactured by: Shinko Denshi Co.,Ltd.,Japan  
Marketed by:

Essae-Teraoka Pvt. Ltd.

410, 100ft Road, 4th Block,  
Koramangala, Bengaluru-560 034  
info@essae.com  
http://www.essae.com

+91 80 3021 3021  
+91 80 3021 3001  
1-800-425-3111  
0-78488 12346

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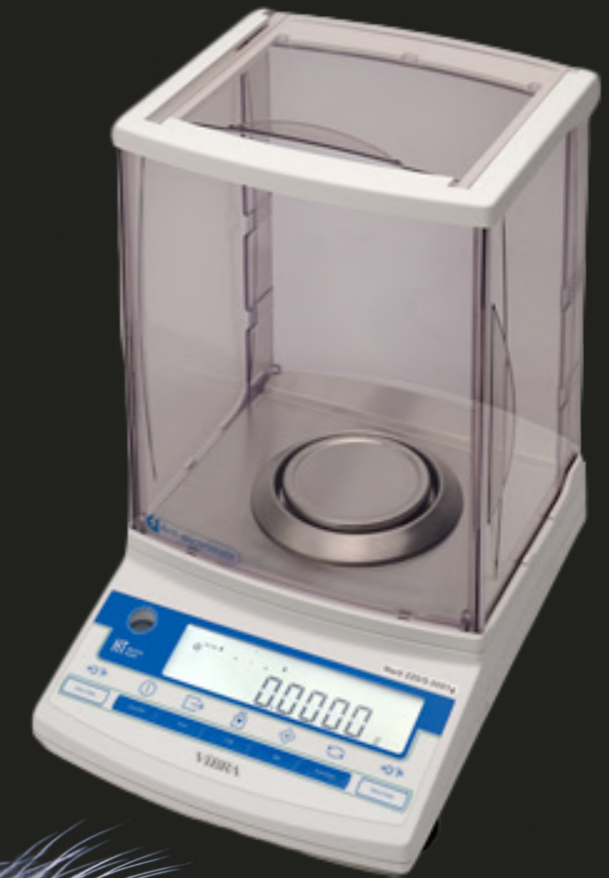
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Measure the Future

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...for Excellence



New Concept For Analytical Balances  
by **VIBRA** Tuning-Fork Sensor



**HT/HTR series**



High performance and durability for everyday laboratory use.

Note: The above model meets the statutory and regulatory requirements as per the provision of legal metrology Act 2009 and legal metrology (General) Rule, 2011. Specifications are subject to change without notice. Other names and logos used are property of respective brands.

## Tuning-Fork technologies add new value for Analytical Balances

### Compact and Safe

Simple, durable and unique structure

### Plug and Perform

Warm up time is reduced by 90%(\*1)

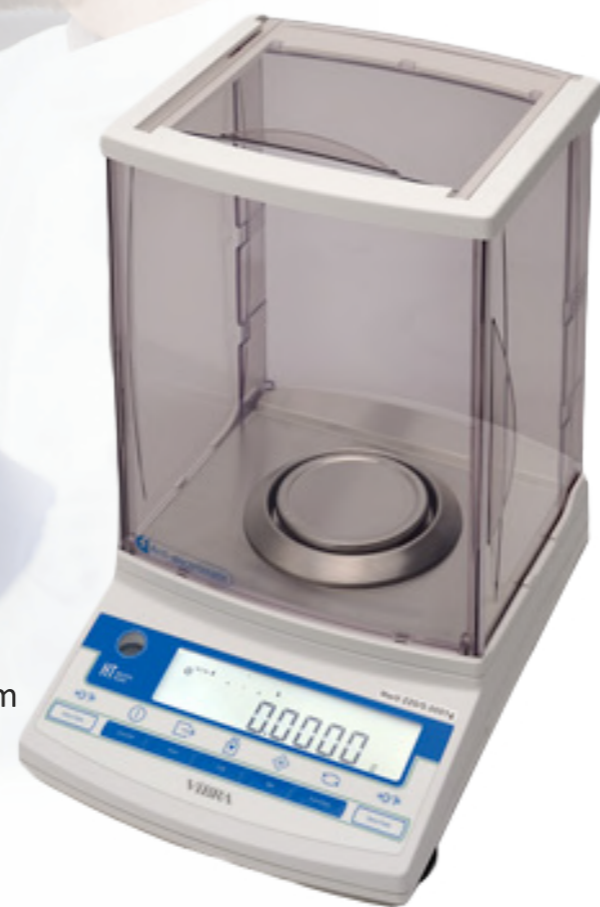
### Energy Saver

Power consumption is cut by 60%(\*2)

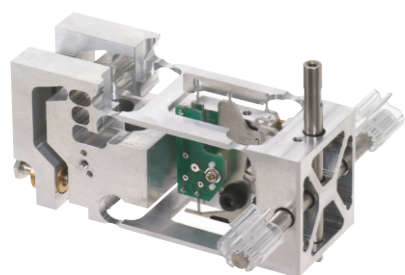
### Reliable Result

Stable measurement is obtained in the long term

(\*1) compared with other VIBRA analytical balances based on electromagnetic system  
 (\*2) compared with other balances with same capacity and readability range

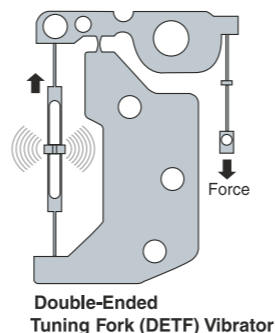


# HT/HTR series



## Tuning-Fork Sensor A Revolution in Weighing

The Tuning-Fork Sensor measures force or mass by gauging changes in oscillation frequency when a load is applied to a long, narrow vibrator. The reading output is digital. Unlike load cell or electromagnetic systems, the Tuning-Fork Sensor does not rely on material distortion, electromagnetic force, heavy power consumption, or A/D converters. As a result, the inherent margin of error is extremely small, and high precision can be maintained for a long time.



### All Features Included



#### Anti-Electrostatic 360 Degree Transparent Windshield

Composed of permanently anti-electro static plastic material, weighing can be visible from every angle.

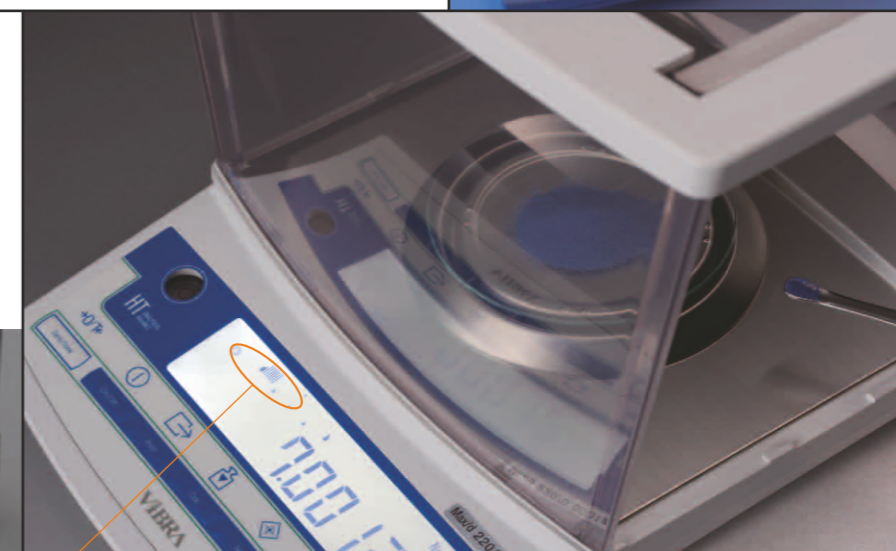
#### Backlit LCD

Measurement result is easily readable with bright display.



#### Fully automatic Span Adjustment, Automatic Repeatability Measurement (ARM)

The balance can be calibrated auto-matically to maintain good condition. The condition is easily checked with single key operation by measuring and calculating repeatability standard deviation. (for HTR type only)



#### Bar Graph Display

A 40-step bar graph display easily checks the current load's weight against the capacity.

#### Connection to PC

RS 232C interface is equipped to connect to PC, printer and other outside devices.



#### Single-Touch Response Setting For Various Environments

The SET key sets different responses in 3 steps in different environmental conditions.



#### Density Determination Mode

Density of solids or liquids is measured with optional density measurement kit.

#### ISO/GLP/GMP Compliant Printing Record

Calibration procedures and results are recorded and printed with an operational printer.

```

**CALIBRATION**
DATE:2007.12.25
TIME: 09:24
SHINKO DENSHI
TYPE:
      HTR-220
S/N: 071850025
ID: 000101

CAL. INTERNAL
REF: 220.0000 g

COMPLETE
DATE:2007.12.25
TIME: 09:25

SIGNATURE
    
```