ViBRA®
Measure the Future

LIDÉN WEIGHING

TUNING-FORK BALANCE
AJ series

MMTS
5-Year Warranty

Tuning-fork sensor technology that keeps evolving
for high performance from super-precision balances

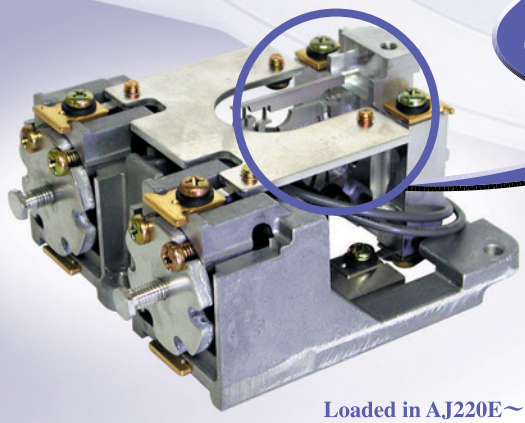
ISO 9001
JQA-2834
TSUKUBA

TECO
ISO 14001:2004
ER-00130

Equipped with latest MMTS for incredible 1/620,000 resolution!

MMTS—An evolution in the fundamental qualities of measurement

The MMTS (Mono-Metal Tuning-fork Sensor) realizes high performance, solid noise resistance, rapid response, and a steady display with little flickering. Moreover, its energy-saving design and simple structure result in excellent long-term stability and outstanding durability.



Loaded in AJ220E～1200E/AJH220E～620E

Tuning-fork sensors —Taking us billions of light years away

Shinko Denshi's tuning-fork sensors are used as high-precision, super-durable force sensors in the primary mirror control systems of Subaru, the world's largest optical telescope.

A full line-up of solutions for your needs

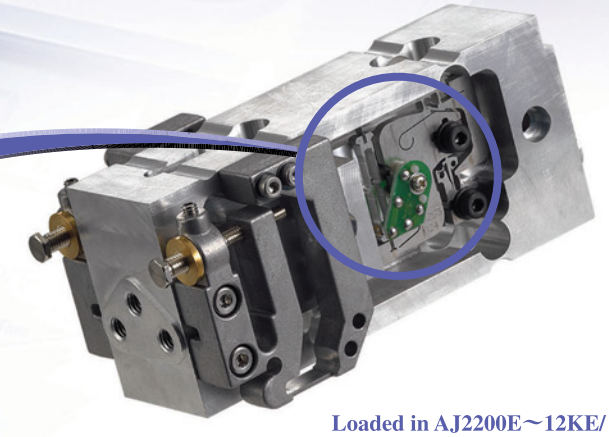
AJ(H)-220(C)E～620(C)E

AJ-820(C)E/ 1200(C)E

AJ(H)-2200(C)E～4200(C)E
AJ-6200(C)E～12K(C)E

5-year warranty

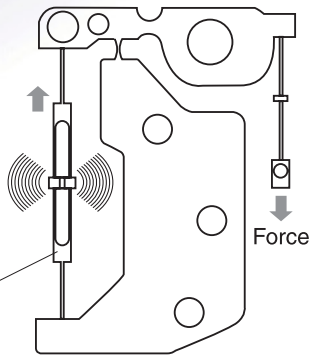
MMTS is covered by a 5-year warranty that attests to its long-term stability and durability.



Loaded in AJ2200E～12KE/
AJH2200E～4200E

What makes the tuning-fork sensor so precise?

The tuning-fork sensor measures force or mass by gauging changes in oscillation frequency when a load is applied to a long, narrow vibrator, and it digitally outputs the readings.



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, so its inherent margin of error is extremely small, and its high precision can be maintained for a long time.

Comparison with other sensors

	Tuning-fork	Load cell	Electromagnetic
Long-term stability (span drift per year)	1/200,000	1/10,000	1/50,000
A/D converter	Unnecessary (digital output)	Necessary (analog output)	Necessary (analog output)
Power consumption	Minute(1/10 of Lord cell)	Low	High
Noise-proof	High	Low	Middle
Warm up	Unnecessary	Necessary	Necessary

Innovative design in a compact body (patent pending)

Our innovative design curves the front of the control panel to offer a compact body without compromising ease of operation.

AJ-820(C)E/1200(C)E

Selectable modes and units

Users can select from 3 modes (weight, unit count, and percentage) and from 12 units of weight.

weight

percentage

quantity

Weighing units

g, ct, oz, lb, ozt, dwt, GN, tl (Hong Kong), tl (Taiwan), tl (Singapore, Malaysia), momme, tola

Comparator function

Users can tell at a glance whether a load is too heavy, too light, or the right weight according to the upper/lower weight limits they preset.

Bar graph display

A 20-step bar graph display readily indicates the current load's weight against the capacity.

Quick-assembly shield

The sturdily constructed, fastener-free shield can be easily assembled or removed, making cleaning and storage simple.

RS-232C interface (standard feature)

This interface allows users to connect the balance with a computer or print out data with our CSP-160/CSP-240 printers.

Specifications

・AJ-XXXCE stands for EC approval models.
・Dry cell batty type is available for each model.

Model	AJ-220E AJ-220CE	AJ-320E AJ-320CE	AJ-420E AJ-420CE	AJ-620E AJ-620CE	AJ-820E AJ-820CE	AJ-1200E AJ-1200CE	AJ-2200E AJ-2200CE	AJ-3200E AJ-3200CE	AJ-4200E AJ-4200CE	AJ-6200E AJ-6200CE	AJ-8200E AJ-8200CE	AJ-12KE AJ-12KCE
Capacity	220g	320g	420g	620g	820g	1220g	2200g	3200g	4200g	6200g	8200g	12000g
Readability	0.001g	0.001g	0.001g	0.001g	0.01g	0.01g	0.01g	0.01g	0.01g	0.01g	0.1g	0.1g
Repeatability(s)	0.001g	0.001g	0.001g	0.001g	0.01g	0.01g	0.01g	0.01g	0.01g	0.01g	0.1g	0.1g
Non-Linearity(typ.)	±0.001g	±0.001g	±0.001g	±0.002g	±0.01g	±0.01g	±0.01g	±0.01g	±0.01g	±0.02g	±0.1g	±0.1g
Pan size	φ118mm				170×142mm		180×160mm					
Dimensions	235×182×168mm(including windshield)				235×182×75mm		265×192×87mm					
Weighing units	g, ct, oz, lb, ozt, dwt, GN, tl(Hong Kong), tl(Taiwan), tl(Singapore, Malaysia), momme, tola											
Power source	AC120/230V DC9V											
Output	RS-232C(standard)											
Measuring system	Tuning-fork frequency sensing(MMTS)											
Tare	Full weighing range											
Calibration	With external calibration weight											
Display	LCD(height: 16.5mm)											
Modes	weighing, counting, %											
Weight	Approx. 1.3kg						Approx. 2.8kg					

Model	AJH-220E AJH-220CE	AJH-320E AJH-320CE	AJH-420E AJH-420CE	AJH-620E AJH-620CE	AJH-2200E AJH-2200CE	AJH-3200E AJH-3200CE	AJH-4200E AJH-4200CE
Capacity	220g	320g	420g	620g	2200g	3200g	4200g
Readability	0.001g	0.001g	0.001g	0.001g	0.01g	0.01g	0.01g
Repeatability(s)	0.001g	0.001g	0.001g	0.001g	0.01g	0.01g	0.01g
Non-Linearity(typ.)	±0.001g	±0.001g	±0.001g	±0.002g	±0.01g	±0.01g	±0.01g
Pan size	φ118mm				180×160mm		
Dimensions	235×182×168mm(including windshield)				265×192×87mm		
Weighing units	g, ct, oz, lb, ozt, dwt, GN, tl(Hong Kong), tl(Taiwan), tl(Singapore, Malaysia), momme, tola						
Power source	AC120/230V DC9V						
Output	RS-232C(standard)						
Measuring system	Tuning-fork frequency sensing(MMTS)						
Tare	Full weighing range						
Calibration	With built-in weight						
Display	LCD(height: 16.5mm)						
Modes	weighing, counting, %						
Weight	Approx. 1.6kg				Approx. 3.7kg		

Options & Peripherals

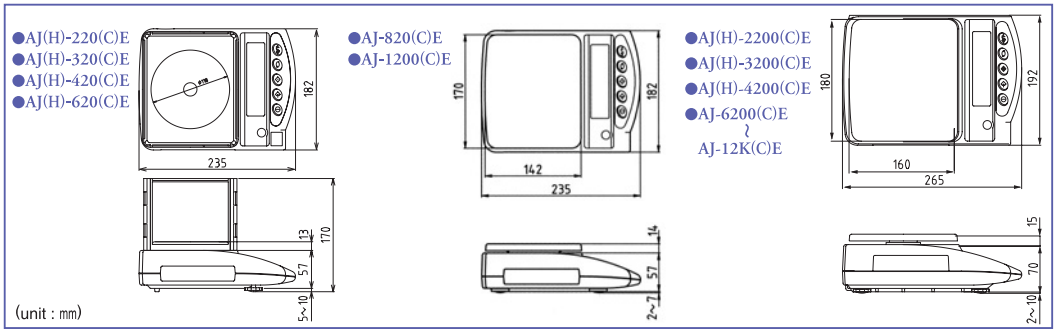
・AJBT(S)／AJBT(M)
Rechargeable battery
(S) for AJ(H)-220(C)E～1200(C)E
(M) for AJ(H)-2200(C)E～12K(C)E
(12-hr charge, 32-hr operation)

・AJUH(S)／AJUH(M)
Under weighing hook
(S) for AJ(H)-220(C)E~1200(C)E
(M) for AJ(H)-2200(C)E~12K(C)E

・SDI/SDR Satellite display

・RTS Database software for Windows

Dimentions



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