Citizen®

ISO 9001 : 2008 CERTIFIED

USP
U.S. Pharmacopeia
The Standard of Quality

IS 9281: Part 3 : 1981

CM/L- 7777809

CE

JAS-ANZ
Acc.No.SY900799IM

ICS

Pharma - Analytical
Laboratory Weighing Balances & Industrial Scales

Turning Technology into Solutions

Precise Results Unrivalled in its performance class

Citizen Scale (I) Pvt Ltd is a leading global supplier of Laboratory weighing balance and precision instruments and services. We have strong leadership positions in all of our businesses and believe we hold global market positions in a majority of them. Specifically, we are the largest provider of weighing Balance & instruments for use in pharma, laboratory, industrial and food retailing applications. We are also a leader in analytical instruments, reaction engineering and real-time analytic systems, process analytics instruments and end-of-line product inspection systems. Our solutions are critical in key R&D, quality control and manufacturing processes for customers in a wide range of industries. Our global sales and service network is one of the most extensive in the industry. We have subsidiaries, sales and service operations in 10 countries.

New Citizen Balances will impress you with their excellent performance, delivering accurate results within the shortest possible time, thanks to MonoTech and Perfect Self Automatic Calibration (PSAC).

Pharma - Analytical Laboratory Weighing Balances & Industrial Scales

Easy Data Transfer

Only a single cable is required to transfer balance data to MSExcel or other Windows application.

No troublesome interface attachment or software installation is necessary. This unique feature makes Citizen balance extremely convenient for data analysis.

EXCELLENT R EADABILITY

High Contrast Backlit LCD display is exceptionally easy to read under any room lighting conditions.
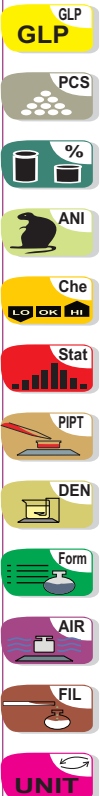

THE BRILLIANT MONO-TECH

Unique & unequalled high end MONO-TECH technology (Weigh Sensor) to match the highest international standards.

ELECTROMAGNETIC COMPATIBILITY

Metal housing eliminates the effects of thunderstorms or electromagnetic inter-ference from other equipments.

Pipette

Filter Micro Balance

CITIZEN CM Series is designed to meet the highest requirements for determination of mass. Its built-in system of automatic internal adjustment/calibration maintains excellent measurement reliability and accuracy.

The device comprises two major components (an indicator and a precise mechanical measuring system which are enclosed separately). Such design eliminates an influence of heat sourcing from instrument's electronics on its mechanical components and additionally protects it from shocks and vibrations caused by users operating the instrument. All the elements of a microbalance are made of glass and steel which eliminates an impact of electro statics on weighing process.

- Internal Calibration / Adjustment Inside the balance housing are built in motorized calibration / adjustment weights.

- **iso CAL Perfect Self Auto Calibration** When the ambient temperature changes by a specific value or once a defined time interval has elapsed, it performs External Calibration.
- ISO 8655 & 4787 NABL Micro Pipette standard as per FDA rule compliance.

USP (United States Pharmacopeia) 21CFR Part 11 Compliance Available on Request.
Performance Depending on the installation location and environmental conditions, the value could be higher.

Laboratory Weighing Application
- Food • Pharmaceutical • Research Institute
- Testing Laboratory • Pollution Control Board
- Environmental Testing Laboratory
- Mass and Volume Testing Laboratory
- Hospital Research Lab

Specifications of CM SERIES

MODEL	UCM 2	CM 5	CM 6.1	CM 11	CM 21	CM 31	CM 2F	CM 5F	CM 11P
CAPACITY	2.1 g	5 g	6.1 g	11 g	21 gm	31 gm	2 gm	5 gm	11 gm
READABILITY	0.1 µg	1 µg	1 µg	1 µg	1 µg	1 µg	1 µg	1 µg	1 µg
REPEATABILITY (+/-)	0.3 µg	1 µg	1 µg	1 µg	3 µg	8 µg	1 µg	1 µg	3 µg
LINEARITY (+/-)	1.5 µg	5 µg	5 µg	6 µg	8 µg	10 µg	5 µg	5 µg	6 µg
Min. Weight as per USP	0.3 mg	2 mg	2 mg	6 mg	8 mg	10 mg	2 mg	2 mg	6 mg
PAN SIZE (MM/INCH)	30Ø / 1.2Ø						50-100Ø		15Ø / 0.6Ø
RESPONSE TIME	6 - 8 sec.								
CALIBRATION	**Perfect Auto Internal Time & Temp Controlled Smart Calibration**								
DISPLAY	Alpha Numerical Backlite Display with A.E.P.								
UNITS OF MEASURE	g, mg, ct, GN, mo, oz, dwt								
SENSITIVITY DRIFT	± 1ppm / °C in temperature +15° to 35°C								
INTERFACES	RS-232C or USB								
TARE RANGE	Full Capacity								
OPERATING TEMP.	18°C ~ 30°C								
PROTECTION	User Administration & Password Protection								
TERMINAL	Detachable & Adjustable Display Terminal								
APPLICATION MODES	PCS, % Weighing, Animal/Dynamic Weighing, Check Weighing, Automatic Density Determination Formulation etc.								
COMPLIANCE	**ISO GLP / GMP Compliance**								
POWER SUPPLY	A/C Adapter 230 V or 115V +/- 20% 50-60 Hz								
WEIGHING CHAMBER	90 mm Ø								
NET WT. / GROSS WT.	10.20 kg / 14.70 kg								
PACKING SIZE (mm/inch)	565 x 565 x 355 / 22.2" x 22.2" x 14" (L x W x H)								

Semi-Micro Balances

CITIZEN Semi-Micro Balances has been designed to meet high requirement for measuring small masses with high readability (d =1mg). They are equipped with Alpha Numerical display with user menu, and CX Series Semi - Micro range 0.01mg to 220g.

STANDARD FEATURES - CX Series
- Easy to read Large backlite LCD display with A.E.P. (Advanced Eye Protection)
- Standard RS 232 C interface.
- Windows Direct Communication
- Hanger for Below Balance weighing
- **iso CAL Perfect Self Auto Calibration** When the ambient temperature changes by a specific value or once a defined time interval has elapsed, it performs External Calibration & fully automatic Internal calibration with built in motorized calibration weight for CX Series.
- Sensor Type : EMFC
- IP Protection : IP54
- Dye cast aluminium design for long term stability and accurate results
- User selectable stability and filter level
- Spacious draft shield interior
- Improved Repeatability For Better Results
- Statistics & Totalization
- Animal Weighing & Formulation
- Density measurement for solid and liquid [With optional eqp. & software]
- Auto Zero tracking
- Sprit leveling : Balance have adjustable feet for maintaining / providing uniform level.
- Overload protection.
- Two Tare Keys (Left & Right)
- Programmable smart keys provided for shortcut access to applications like Power On/Off, Tare etc.
- Balance are equipped with a lug for optional anti-theft device.
- Real Time Clock.
- USP (United States Pharmacopeia) 21CFR Part 11 Compliance Available on Request. Performance Depending on the installation location and environmental conditions, the value could be higher.

specifications of CX SERIES

MODEL	CX 205	CX 265N	CX 265	CX 165	CX 85S
CAPACITY	200g	80/220g	60/210g	100/160g	80g
READABILITY	0.01mg	0.01/0.1mg	0.01/0.1mg	0.01/0.1mg	0.01mg
REPEATABILITY (+/-)	0.03mg	0.02/0.1mg	0.02/0.1mg	0.02/0.1mg	0.02mg
LINEARITY (+/-)	0.1mg	0.04/0.2mg	0.05/0.2mg	0.05/0.2mg	0.04mg
Min. Weight as per USP	30mg	30mg	30mg	30mg	30mg
PAN SIZE (MM/INCH)	80Ø / 3.15''Ø				
RESPONSE TIME	5 - 8 sec.				
CALIBRATION	**Perfect Auto Internal Time & Temp Controlled Smart Calibration**				
DISPLAY	Alpha Numerical LCD Backlite Display with A.E.P.				
UNITS OF MEASURE	g, mg, ct, GN, mo, oz, dwt				
SENSITIVITY DRIFT	± 1ppm / °C in temperature +15° to 35°C				
INTERFACES	RS-232C or USB				
TARE RANGE	Full Capacity				
OPERATING TEMP.	18°C ~ 30°C				
PROTECTION	User Administration & Password Protection				
TERMINAL	Detachable & Adjustable Display Terminal				
APPLICATION MODES	PCS, % Weighing, Animal/Dynamic Weighing, Check Weighing, Automatic Density Determination Formulation etc.				
COMPLIANCE	**ISO GLP / GMP Compliance**				
POWER SUPPLY	A/C Adapter 230 V or 115V +/- 20% 50-60 Hz				
WEIGHING CHAMBER	165mm x 185mm x 220mm				
NET WT. / GROSS WT.	10.20 kg / 14.70 kg				
PACKING SIZE (mm/inch)	565 x 565 x 355 / 22.2'' x 22.2'' x 14'' (L x W x H)				

CITIZEN CX/CY Series Analytical Balances offers exactly right performance and convenient features that you need to accomplish for the most sophisticated weighing tasks.

STANDARD FEATURES - CX / CY Series
- Easy to read Large backlite LCD display with A.E.P. (Advanced Eye Protection)
- Standard RS 232 C interface.
- Windows Direct Communication
- Hanger for Below Balance weighing
- **iso CAL Perfect Self Auto Calibration** When the ambient temperature changes by a specific value or once a defined time interval has elapsed, it performs External Calibration & fully automatic Internal calibration with built in motorized calibration weight for CX Series
- Automatic External calibration for CY Series
- Sensor Type : Electromagnetic force compensation
- IP Protection : IP54
- Dye cast aluminium design for long term stability and accurate results
- User selectable stability and filter level
- Spacious draft shield interior
- Improved Repeatability For Better Results
- Statistics & Totalization
- Animal Weighing & Formulation
- Density measurement for solid and liquid [With optional eqp. & software]
- Auto Zero tracking
- Sprit leveling : Balance have adjustable feet for maintaining / providing uniform level.
- Overload protection.
- Two Tare Keys (Left & Right)
- Programmable smart keys provided for shortcut access to applications like Power On/Off, Tare etc.
- Balance are equipped with a lug for optional anti-theft device.
- Real Time Clock.
- USP (United States Pharmacopeia) 21CFR Part 11 Compliance Available on Request. Performance Depending on the installation location and environmental conditions, the value could be higher.

Split Type Balance

GLP PRINT FORMATS

```
22-Mar-12        11:13AM
          Citizen
Model            CX 220
Ser. no.        9021107
Ver. no.        r0.1.04
ID              1234567

Calibration:    Internal

W-ID         ............
Temperature    29.378'C
Set          + 200.0000g
Diff.          -0.0031g


Internal Cal Done
Diff.           0.0000g

22-Mar-12        11:13AM
Name :       ............
```

specifications of CX/CY SERIES

	Professional Level				Standard Level			
MODEL	**CX 320**	**CX 220**	**CX 120**	**CX 65**	**CY 304**	**CY 204**	**CY 104**	**CY 64**
CAPACITY	320 g	220 g	120 g	65 g	320 g	220 g	120 g	60 g
READABILITY	0.1mg	0.1mg	0.1mg	0.1mg	0.1mg	0.1mg	0.1mg	0.1mg
REPEATABILITY (+/-)	0.2mg	0.1mg	0.1mg	0.1mg	0.1mg	0.1mg	0.1mg	0.1mg
LINEARITY (+/-)	0.3mg	0.2mg	0.2mg	0.2mg	0.2mg	0.2mg	0.2mg	0.2mg
Min. Weight as per USP	160mg	160mg	160mg	160mg	160mg	160mg	160mg	160mg
PAN SIZE (MM/INCH)	90Ø / 3.5Ø							
RESPONSE TIME	2 - 3 sec.							
DISPLAY	Alpha Numerical LCD Backlite Display with A.E.P.							
CALIBRATION	**Motorised Internal**				**Automatic External**			
UNITS OF MEASURE	gm, mg, ct, GN, mo, oz, dwt							
TARE RANGE	Ful Capacity							
OPERATING TEMP.	10ºC ~ 40ºC							
PROTECTION	User Administration & Password Protection							
SENSITIVITY DRIFT	± 1ppm / ºC in temperature +15º to 35ºC							
APPLICATION MODES	PCS, % Weighing, Animal / Dynamic Weighing, Check Weighing, Automatic Density Determination, Formulation, Automatic Statistic Calculator etc.							
COMPLIANCE	**ISO, GLP / GMP / USP Compliance**							
POWER SUPPLY	A/C Adapter 230 V or 115 V +/- 20% 50-60 Hz							
NET WT. / GROSS WT.	8.0kg / 9.3kg							
PACKING SIZE (mm/inch)	470mm x 310mm x 500mm / 18.5" x 12.2" x 19.7" (L x W x H)							

GLP · PCS · % · ANI · Che LO OK HI · PIPT · DEN · Form · AIR · FIL · UNIT · PC RS 232 · USB · U · CAL INT · CAL EXT · Statistical · USP U.S. Pharmacopeia The Standard of Quality

CY-C / CY SERIES
Precision Balances

CITIZEN new and improved precision series incorporates unique and unequaled High end technology built to match the highest international standards. The result is TEN fold increase in weighing performance which maintains our proven, simple and easy to use operator interface. Attractive quality of this new design is demonstrated by the **CE mark** of conformity along with the CITIZEN ISO 9001:2008 certification.

STANDARD FEATURES
- Easy to read Large backlite LCD display with A.E.P. (Advanced Eye Protection)
- Standard RS 232 C interface.
- Windows Direct Communication
- Hanger for Below Balance weighing
- **iso CAL Perfect Self Auto Calibration** When the ambient temperature changes by a specific value or once a defined time interval has elapsed, it performs External Calibration & fully automatic Internal calibration with built in motorized calibration weight for CY - C Series
- Automatic External calibration for CY Series
- Sensor Type : Electromagnetic force compensation
- IP Protection : IP54
- Dye cast aluminium design for long term stability and accurate results
- User selectable stability and filter level
- Spacious draft shield interior
- Improved Repeatability For Better Results
- Statistics & Totalization
- Animal Weighing & Formulation
- Density measurement for solid and liquid [With optional eqp. & software]
- Auto Zero tracking
- Sprit leveling : Balance have adjustable feet for maintaining / providing uniform level.
- Overload protection.
- Two Tare Keys (Left & Right)
- Programmable smart keys provided for shortcut access to applications like Power On/Off, Tare etc.
- Balance are equipped with a lug for optional anti-theft device.
- Real Time Clock
- USP (United States Pharmacopeia) 21CFR Part 11 Compliance Available on Request. Performance Depending on the installation location and environmental conditions, the value could be higher.

GLP PRINT FORMATS

```
24-Jun-16      11:13AM
        Citizen
Model           CY 220
Ser. no.       1624590
Ver. no.        r0.1.04
ID             1234567

Calibration:   Internal

W-ID       ............
Temperature   29.378'C
Set         + 200.000g
Diff.         -0.031g

Internal Cal Done
Diff.          0.000g

22-Mar-12      11:13AM
Name :
           ............
```

Split Type Balance

Specifications of CY-C / CY SERIES

MODEL	CY 220C	CY 510C	CY 1003C	CY 2003C	CY 120	CY 220	CY 320	CY 510	CY 720	CY 1003	CY 2003	CY 3003
	Professional Level				**Standard Level**							
CAPACITY	220 g	510 g	1000 g	2000 g	120 g	220g	320 g	510 g	720 g	1000 g	2000 g	3000 g
READABILITY	0.001 g	0.001 g	0.001 g	0.001 g	0.001 g	0.001 g	0.001 g	0.001 g	0.001 g	0.001 g	0.001 g	0.001 g
REPEATABILITY (+/-)	0.001 g	0.001 g	0.002 g	0.003 g	0.001 g	0.001 g	0.001 g	0.001 g	0.001 g	0.002 g	0.003 g	0.003 g
LINEARITY (+/-)	0.002 g	0.002 g	0.005 g	0.005 g	0.002 g	0.002 g	0.002 g	0.002 g	0.002 g	0.005 g	0.005 g	0.005 g
Min. Weight as per USP	1 g	1 g	1 g	1 g	1 g	1 g	1 g	1 g	1 g	1 g	1 g	1 g
PAN SIZE (mm/inch)	128 x 128 mm / 5.0" x 5.0"											
RESPONSE TIME	2-3 sec.											
DISPLAY	Alpha Numerical LCD Backlite Display with A.E.P.											
CALIBRATION	**Motorised Internal**				**Automatic External**							
UNITS OF MEASURE	gm, mg, ct, GN, mo, oz, dwt											
TARE RANGE	Full Capacity											
OPERATING TEMP.	10º ~ 40ºC											
SENSITIVITY DRIFT	± 1ppm / ºC in temperature +15º to 35ºC											
PROTECTION	User Administration & Password Protection											
APPLICATION MODES	PCS, % Weighing, Animal / Dynamic Weighing Check Weighing, Automatic Density, Determination, Formulation Automatic Statistic Calculator etc.											
COMPLIANCE	**ISO GLP / GMP / USP Compliance**											
POWER SUPPLY	A/C Adapter 230 V-115V +/- 20% 50-60 Hz											
NET WT. / GROSS WT.	5 kg / 6 kg											
PACKING SIZE (mm/inch)	510 x 410 x 330 / 20.1" x 16.1" x 13" (L x W x H)											

Precision Balances

CITIZEN new and improved precision series incorporates unique and unequaled High end technology built to match the highest international standards. The result is TEN fold increase in weighing performance which maintains our proven, simple and easy to use operator interface. Attractive quality of this new design is demonstrated by the **CE mark** of conformity along with the CITIZEN ISO 9001:2008 certification.

STANDARD FEATURES

- Easy to read Large backlite LCD display with A.E.P. (Advanced Eye Protection)
- Standard RS 232 C interface.
- Windows Direct Communication
- Hanger for Below Balance weighing
- **iso CAL Perfect Self Auto Calibration** When the ambient temperature changes by a specific value or once a defined time interval has elapsed, it performs External Calibration & fully automatic Internal calibration with built in motorized calibration weight for CG - C Series
- Automatic External calibration for CG Series
- Sensor Type : Electromagnetic force compensation
- IP Protection : IP54
- Dye cast aluminium design for long term stability and accurate results
- User selectable stability and filter level
- Spacious draft shield interior
- Improved Repeatability For Better Results
- Statistics & Totalization
- Animal Weighing & Formulation
- Density measurement for solid and liquid [With optional eqp. & software]
- Auto Zero tracking
- Sprit leveling : Balance have adjustable feet for maintaining / providing uniform level.
- Overload protection.
- Two Tare Keys (Left & Right)
- Programmable smart keys provided for shortcut access to applications like Power On/Off, Tare etc.
- Balance are equipped with a lug for optional anti-theft device.
- Real time clock
- USP (United States Pharmacopeia) 21CFR Part 11 Compliance Available on Request. Performance Depending on the installation location and environmental conditions, the value could be higher.

GLP PRINT FORMATS

```
24-Jun-16        11:13AM
         Citizen
Model          CG 3102
Ser. no.       1624754
Ver. no.       r0.1.04
ID             1234567

Calibration:   Internal

W-ID       ...........
Temperature    29.378'C
Set          + 200.00g
Diff.          -0.31g


Internal Cal Done
Diff.           0.00g

22-Mar-12        11:13AM
Name :
           ...........
```

Split Type Balance

Specifications of CG-C / CG SERIES

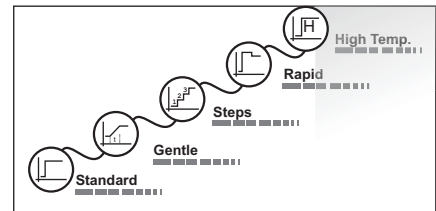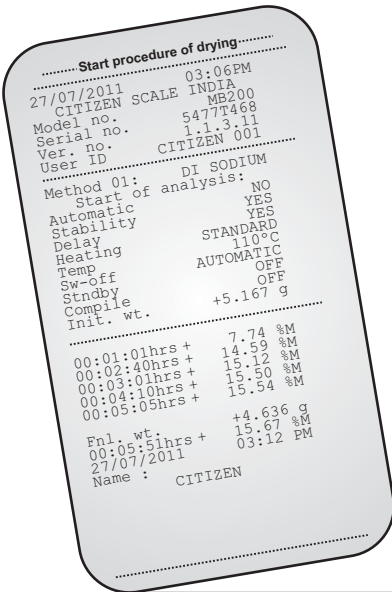| MODEL	CG 2202C	CG 4102C	CG 602	CG 1202	CG 2202	CG 3102	CG 4102	CG 6102	CG 8102	CG 3102DR
	Professional Level		Standard Level							Dual Range
CAPACITY	2200g	4100g	600g	1200g	2200g	3100g	4100g	6100g	8100g	300g/3000g
READABILITY	0.01g	0.01g	0.01g	0.01g	0.01g	0.01g	0.01g	0.01g	0.01g	1mg/10mg
REPEATABILITY (+/-)	0.01g	0.01g	0.01g	0.01g	0.01g	0.01g	0.01g	0.01g	0.01g	1mg/10mg
LINEARITY (+/-)	0.02g	0.02g	0.02g	0.02g	0.02g	0.02g	0.02g	0.02g	0.05g	1mg/10mg
Min. Weight as per USP	8.2g	8.2g	8.2g	8.2g	8.2g	8.2g	8.2g	8.2g	8.2g	8.2g
PAN SIZE (mm/inch)	195 x 195 / 7.6" x 7.6"		128 x 128/ 5.0" x 5.0"		195 x 195 / 7.6" x 7.6"					128 x 128
RESPONSE TIME	2-3sec.									
DISPLAY	Alpha Numerical LCD Backlite Display with A.E.P.									
CALIBRATION	Motorised Internal		Automatic External							
UNITS OF MEASURE	gm, mg, ct, GN, mo, oz, dwt, t1T, t1H, t1S, mom, Bat, MS									
TARE RNAGE	Full Capacity									
OPERATING TEMP.	10°C ~ 40°C									
PROTECTION	User Administration & Password Protection									
SENSITIVITY DRIFT	± 1ppm / °C in temperature +15° to 35°C									
APPLICATION MODES	PCS, % Weighing, Animal / Dynamic Weighing Check Weighing, Automatic Density, Determination, Formulation Automatic Statistic Calculator etc.									
COMPLIANCE	ISO GLP / GMP / USP Compliance									
POWER SUPPLY	A/C Adapter 230 V-115 V +/- 20% 50-60 Hz									
NET WT. / GROSS WT.	5 kg / 6 kg									
PACKING SIZE (mm/inch)	510 x 400 x 260 / 20.1" x 15.8" x 10.2" (L x W x H)									

MB SERIES
Moisture Analyzer Balances

Citizen's New MB Series Moisture Analyzer With HALOGEN Heating is mainly Designed on the basis of Time Saving Factor for universal use in Chemical, Pharmaceutical, Oil, Petroleum Industries also in Material Testing & Environmental Laboratories & in Sewage Treatment Plants.
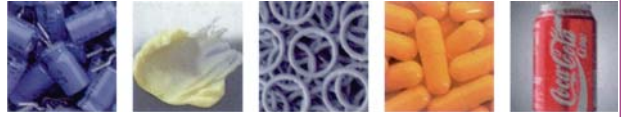
MB Series is compact in shape & big in performance. It performs all the major Functions of routine moisture analysis with following features.

STANDARD FEATURES

- Data memory up to 1000 data
- Data can be divided in to 40 methods or 100 batchs
- User can avail Statistic method or batch wise
- Facility of compile two method
- PS2 Key Board connectivity make it very user friendly operation.
- Password protection prevent unauthorized use of the important setting
- 4 user ID configurable
- ISO/GLP calibration report for weight and temperature, also last successfully calibration report can be avail any time form the memory
- Programmable customize print format
- Alpha numeric keypad makes it easy to enter method name
- Weight in assist helps user to do accurate measurements
- Facility to add any insolvent before actual drying
- Possible to configure stand by temperature between 30°C to 175°C
- Highly flexible display for changing font, background and contrast
- User configurable print interval during the moisture determination
- Auto Off, Auto keypad lock

```
········ Start procedure of drying ········
27/07/2011              03:06PM
     CITIZEN SCALE INDIA
Model no.           MB200
Serial no.          5477T468
Ver. no.            1.1.3.11
User ID             CITIZEN 001

Method 01:          DI SODIUM
   Start of analysis:     NO
Automatic                 YES
Stability                 YES
Delay                STANDARD
Heating                 110°C
Temp               AUTOMATIC
Sw-off                    OFF
Stndby                    OFF
Compile             +5.167 g
Init. wt.

··········································
00:01:01hrs +          7.74 %M
00:02:40hrs +         14.59 %M
00:03:01hrs +         15.12 %M
00:04:10hrs +         15.50 %M
00:05:05hrs +         15.54 %M

Fnl. wt.             +4.636 g
00:05:51hrs +         15.67 %M
27/07/2011           03:12 PM
Name :    CITIZEN
··········································
```

MODEL	MB 54	MB 40	MB 50	MB 120	MB 200	
Max capacity	50g	40g	50g	120g	200g	Auto
Precision of readout mass	0.1mg	1mg	1mg	1mg	1mg	
Precision of readout of moisture	0.0001%	0.001%	0.001%	0.001%	0.001%	
Repeatability (Sample 2g) (sd)	0.05%	0.1%	0.1%	0.1%	0.1%	
Repeatability (Sample 10g) (sd)	0.02%	0.03%	0.03%	0.03%	0.03%	Manual
Display information	% moisture, %of dry sustance, diagram graph, ratio, % Atro moisture, % Atro Dry, %gm/ltr.					
Range of temperature of drying	**Max to 175°C (option to 250°C)**					
Maximum time selection	999.9 min.					Timed
Set temperature	Interval 1°C					
Software of drying	Standard, Rapid, Step, Gentle & High Temp.					
Auto options-turn off	Automatic, Manual timed, User DEF G/T, User DEF % U/T, Intelligent					
Menu language	English					User Def G/T
Transfer of data	RS 232 / USB / Ethernet					
Pan Size (mm/inch)	95Ø mm / 3.8"Ø					
Display	Backlite Graphical LCD Display					User Def %U/Time
Temperature of work	15°C to 40°C					
Tare Rage	Full Capacity					
Voltage of power supply	110, 220-230V / 50-60Hz					
Net Wt. / Gross Wt.	7 kg / 8 kg					Intelligent
Packing Size (mm/inch)	400 x 340 x 300 / 15.8" x 13.4" x 11.9" (L x W x H)					

Specifications of MB SERIES

High Temp. / Rapid / Steps / Gentle / Standard

Industrial Precision Balances

Citizen SSH Series is a Industrial Precision Balances with electromagnetic mechanism.It comes with following features for high performance accuracy.

STANDARD FEATURES
- Backlite LCD Display for easy view
- Standard RS 232 interface output
- Rust proof stainless steel platter
- Under hook weighing
- External Calibration
- Optional : External battery backup

MODEL	SSH 95	SSH 94	SSH 94H	SSH 93	SSH 92	SSH 91
CAPACITY	15 kg	20 kg	25 kg	35 kg	50 kg	60 kg
READABILITY	0.1 gm	0.1 gm	0.1 gm	0.1 gm	1 gm	1 gm
REPEATABILITY (+/-)	0.1 gm	0.1 gm	0.1 gm	0.1 gm	1 gm	1 gm
LINEARITY (+/-)	0.2 gm	0.2 gm	0.2 gm	0.2 gm	2 gm	2 gm
PAN SIZE (MM/INCH)	400 x 300 / 15.7" x 11.8"					
RESPONSE TIME	2-3sec.					
DISPLAY	Alpha Numerical LCD Backlite Display with A.E.P.					
CALIBRATION	**Automatic External**					
UNITS OF MEASURE	g. mg, ct, GN, mo, oz, dwt, T1T, t1H, t1S, t1S, mom, Bat, MS					
TARE RANGE	Full Capacity					
OPERATING TEMP.	15°C to 40°C					
PROTECTION	User Administration & Password Protection					
APPLICATION MODES	PCS, % Weighing, Animal / Dynamic Weighing Check Weighing, Automatic Density, Determination, Formulation Automatic Statistic Calculator etc.					
COMPLIANCE	**ISO GLP / GMP / USP Compliance**					
POWER SUPPLY	A/C Adapter 230 V-115 V +/- 20% 50-60 Hz					

Industrial Precision Balances

Citizen SSH Series is a Industrial Precision Balances with loadcell based. It comes with following features for high performance accuracy.

STANDARD FEATURES

- Backlite LCD Display for easy view
- Rust proof stainless steel platter
- External Calibration
- Built-in rechargeable battery for 45 hours of continuous use.
- Environmentally protected load cell.
- Rugged construction suitable for industrial environment.
- Low Battery Indication.

MODEL	SSH 91T	SSH 90T	SSH 89T	SSH 90B	SSH 90AB	SSH 87B	SSH 88B	SSH 89B
CAPACITY	60 kg	100 kg	150 kg	100 kg	100 kg	200 kg	200 kg	500 kg
READABILITY	1 gm	1 gm	1 gm	1 gm	2 gm	2 gm	5 gm	10 gm
REPEATABILITY (+/-)	1 gm	1 gm	1 gm	1 gm	2 gm	2 gm	5 gm	10 gm
LINEARITY (+/-)	2 gm	2 gm	2 gm	4 gm	6 gm	6 gm	10 gm	20 gm
PAN SIZE (MM/INCH)	320 x 360 / 12.6" x 14.2"			400 x 500 / 15.7" x 19.7"				
RESPONSE TIME	2-3sec.							
DISPLAY	Alpha Numerical LCD Backlite Display with A.E.P.							
CALIBRATION	**Automatic External**							
UNITS OF MEASURE	g. mg, ct, GN, mo, oz, dwt, T1T, t1H, t1S, t1S, mom, Bat, MS							
TARE RANGE	Full Capacity							
OPERATING TEMP.	5°C to 40°C							
POWER SUPPLY	A/C Adapter 230 V-115 V, +/- 20% 50-60 Hz							

CG-L SERIES
Precision Balances

STANDARD FEATURES
- External calibration
- Easy to read LCD Display.
- Multifunction weighing units.
- RS 232 interface (Standard)
- Stabilization times 3-5 sec.
- ABS housing body with acrylic draft shield for 1mg balances.
- Overload protection design.

- Adjusting Program (CAL). For quick setting of the balance's accuracy External adjusting weight required.
- Auto zero tracking, low battery for continues use.
- S.S. Weighing Pan, level indicator, Quick weighing accurate result.
- In built rechargeable battery for continues use.

Model	CG 103	CG 203	CG 302L	CG 602L	CG 2002L	CG 3001L	CG 6001L	CG 10000L
Capacity	100 gm	200 gm	300 gm	600 gm	2000 gm	3000 gm	6000 gm	10000 gm
Readability	0.001 gm	0.001 gm	0.01 gm	0.01 gm	0.01 gm	0.1 gm	0.1 gm	0.1 gm
Repeatability (+/-)	0.001 gm	0.001 gm	0.01 gm	0.01 gm	0.01 gm	0.1 gm	0.1 gm	0.1 gm
Linearity (+/-)	0.002 gm	0.002 gm	0.02 gm	0.02 gm	0.02 gm	0.2 gm	0.2 gm	0.2 gm
Pan Size (mm)	90 mm Ø		128 mm Ø		138 mm Ø	183 x 160 mm		

CTG SERIES
Precision Balances

STANDARD FEATURES
- Compact and space saving.
- Large Stainless Steel Plate.
- Accurate to within ±3 division at full load.
- Overload Protection.
- Draft Shield for more accurate reading.
- Standard RS 232C Interface for data output.
- LED 7 Digit Display for easy viewing.
- Standard dual side or External Display.

- Auto - Zero Tracking, Automatic External Calibration.
- 8 different weighing units such as g, ct, Tola etc.
- Piece Counting & Percentage Weighting Function.
- With leveling bubble and adjustable feet for the stability of scale.
- Inbuilt rechargeable battery for continues use.
- AC or DC Power supply ; Outfit AC/DC adapter.

Model	CTG 302	CTG 602	CTG 1202
Capacity	300 gm	600 gm	1200 gm
Readability	0.01 gm	0.01 gm	0.01 gm
Repeatability (sd)	± 0.03 gm	± 0.03 gm	± 0.03 gm
Linearity (+/-)	0.01 gm	0.01 gm	0.01 gm
Pan Size (mm)	118 Ø		145 x 125

MP SERIES
Compact Scale

STANDARD FEATURES
- Compact and space saving.
- Rugged Design ABS plastic housing with efficient bench space usage.
- Simple to used.
- Auto External Calibration.
- Backlight LCD Display for easy viewing.
- Weighing unit gm, dwt, oz, ozt, available.
- Auto zero tracking.
- AC or DC Power supply : Outfit AC/DC adapter.
- Over Load Indication.
- Improved repeatability for better results.
- **GSM** Unit Available up to 300gm.

Model	MP 300G	MP 300	MP 500	MP 1000	MP 3000	MP 5000
Capacity	300 gm	300 gm	500 gm	1000 gm	3000 gm	5000 gm
Accuracy	0.01 gm	0.01 gm	0.01 gm	0.1 gm	0.1 gm	1 gm
Pan Size (mm/inch)	120 Ø / 4.7"Ø	110 Ø / 4.3"Ø	120Ø / 4.7"Ø	155x155 mm / 6.1"x6.1"	120x120 mm / 6.1"x6.1"	155x155 mm / 6.1"x6.1"
Weighing Units	Gram, oz, dwt, ozt					
Tare Range	Full					

Table Top Scale

CTG Series

CKG / CTP Series

IP67

CTG-S Series

-: Optional :-

Flameproof Indicator

STANDARD FEATURES
- High resolution upto 30,000 counts.
- Easy to read (0.56") Bright RED LED / LCD display.
- Built-in rechargeable battery for continuous use.
- Piece counting function available.
- Environmentally protected Load Cell.
- Rust Proof Stainless Steel Platter.
- Auto Calibration.
- Stainless Steel Platter & Body. (CTG- S Series)
- Power AC 230V, + 10%, 50-60 Hz & with built-in rechargeable battery backup
- **Flame Proof Indicator available for SS Table Top Scale certified by CIMFR, Dhanbad for use in Hazardous area.**

Optional
- RS 232C Interface

ABS Body Table Top Scale

MODEL	CTG 3	CTG 6	CTG 10	CTG 15	CTG 30	CTG 31
Capacity	3000 g	6 Kg	10 Kg	15 Kg	30 Kg	30 Kg
Readability	0.1 g	0.5 g	0.5 g	1 g	2 g	1 g
Pan Size (mm / inch)	290mm x 240 mm / 9.5" x 11.5"					

Model "CKG" Suffix stand for Piece Counting Scale
Model "CTP" Suffix stand for Price Counting Scale

Stainless Steel Table Top Scale

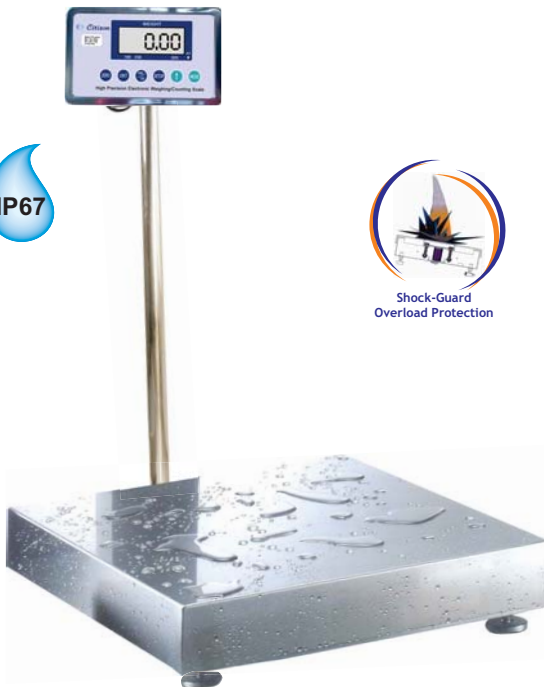| MODEL	CTG 3S	CTG 6S	CTG 10S	CTG 15S	CTG 30S	CTG 31S
Capacity	3000 g	6 Kg	10 Kg	15 Kg	30 Kg	30 Kg
Readability	0.1 g	0.5 g	0.5 g	1 g	2 g	1 g
Pan Size (mm / inch)	250mm x 210 mm / 9.8" x 8.2"					

Stainless Steel Platform Scale

IP67

Shock-Guard Overload Protection

-: Optional :-

SS Indicator

Built in Printer Indicator

STANDARD FEATURES
- High resolution upto 15,000 counts.
- Easy to read (0.56") Bright LED / LCD display.
- Rugged construction suitable for Industrial application.
- Optional remote display available for customer.
- Environmentally protected loadcells IP67 Class Stainless Steel Loadcells for washdown application..
- MOC : 304L / 316L
- Stainless Steel Capsulated Loadcell for Complete washdown applications.
- Auto-off Function for power saving.
- Safety overload 150% of the scale capacity.
- Dust Resistance Membranes key.
- Power AC 220V + 10% 50-60 Hz & with built-in rechargeable battery backup

Optional
- RS 232C Serial Interface port facility.
- 4-20 mA, Set point facility, potential free output.
- (A Type) SS Roller Available.
- Built In Printer Indicator
- **Flame Proof Indicator are certified by CIMFR, Dhanbad for use in Hazardous area.**

Capsulated Loadcell

Roller & Ramp

Flameproof Indicator

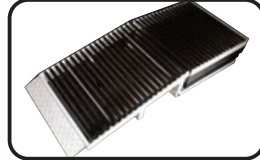| MODEL	CTG 50S	CTG 60S	CTG 100S	CTG 150S	CTG 100S	CTG 200S	CTG 300S	CTG 500S
Capacity	50 Kg	60 Kg	100 Kg	150 Kg	100 Kg	200 Kg	300 Kg	500 Kg
Readability	5 g	5 / 10 g	10 g	10 g	10 g	20 g	20 / 50 g	50 g
Platform Size (mm)	400 x 400 / 15.7" x 15.7"		500 x 500 / 19.7" x 19.7"		600 x 600 / 23.6" x 23.6"			

-: Optional :-

Built in Printer Indicator

"CTP/CKG" Counting Indicator

Flameproof Indicator

Roller & Ramp

STANDARD FEATURES

- High resolution upto 15,000 counts.
- Easy to read (0.56'') Bright RED LED / LCD display.
- Net/Gross Function.
- Built-in rechargeable battery for continuous use.
- Optional remote display available for customer.
- Environmentally protected load cell IP67.
- Rugged construction suitable for Industrial environment.
- Single Load Cell Type with IP 67 Class Load cell.
- Power AC 220V + 10% 50-60 Hz & with built-in rechargeable battery backup

Optional

- RS 232C Interface
- Built In Printing Indicator available on request.
- 4-20 mA Facility, Set point facility.
- (A Type) MS Roller Ramp Available Version for special industrial application.
- Piece Counting Facility (Model CKG Series)
- **Flame Proof Indicator are certified by CIMFR, Dhanbad for use in Hazardous area.**

Bench Scale

MODEL	CTG 30B	CTG 50B	CTG 60B	CTG 60	CTG 150	CTG 200	CTG 300	CTG 500	CTG 500	CTG 1000
Capacity	30 Kg	50 Kg	60 Kg	50 Kg	150 Kg	200 Kg	300 Kg	500 Kg	500 Kg	1000 Kg
Readability	5 g	5 g	5 / 10 g	5 / 10 g	10 g	20 g	20 / 50 g	50 g	100 g	200 g
Platform Size (mm)	400 x 400			500 x 500	600 x 600				750 x 750	1000 x 1000

Model : CKG" Suffix stand for Piece Counting Scale

Shipper Scale

Dot Matrix Printer

STANDARD FEATURES

- Interface to Label / Dot Matrix Printers / Scanner.
- Weighing Scale / Data Processing Capacity.
- Report for Bill Summary / Weighments for day.
- 5000 Shipper Memory, Upgradeable to 20,000.
- Master - Product, Customer, Brands.
- Dispense Mode / Shipper Mode Slips.
- Real Time Clock with Backup support.
- Check Weighing / Counting Accumulation modes.
- Fully programmable with front Panel.
- Labels support for Shipper with Barcoding.
- 500,000 Counts Internal / Up to 50,000 external.
- Bi Directional RS 232 / USB for data output.
- Export Data to Pen Drive Excel Format

```
        USV  PHARMA

 S#:00213
 BALANCE: DM/1232/132
 ITEM:    COMBIFLAM 200mg
 PACK:    1C201
 LOT#:    25C113
 MFG:     24.12.12
 EXP:     25.12.14

 GROSS : 1.120Kg
 NET   : 0.920kg
 TARE  : 0.200kg


 SIGNATURE
 DATE:   22.12.12     TIME:16:40
```

```
        USV  PHARMA

 BALANCE:DM/12 Date:22.12.12
 ITEM: COMBI FLAM 200mg
 LOT#: 25C113
 MFG : 25.12.12 EXP: 25.12.14

 TARGET WT   MAX    MIN   TARGET QTY
   10.50    10.7   10.4    40   pcs
 SHIPPER  WT  (kg) QTY   TIME
   001     10.54   40   13:20
   002     10.50   40   13:21
   003     10.64   40   13:22
   004     10.50   40   13:22
   005     10.60   40   13:23
   006     10.55   40   13:23

 6 BOXES/  63.33kg / 240Nox

 DONE BY PRODUCTION QUALITY
```

MODEL	CTG 60SS	CTG 150SS	CTG 200SS	CTG 300SS	CTG 500SS
Capacity	50 Kg	150 Kg	200 Kg	300 Kg	500 Kg
Readability	5 / 10 g	10 g	20 g	20 / 50 g	50 g
Platform Size (mm)	500 x 500 / 19.7" x 19.7"	600 x 600 / 23.6" x 23.6"			

- **Optional Complete SS platform available**

Ultra Low Profile Platform Scale

-: Optional :-

SS Indicator

Built in Printer Indicator

IP 67 SS Capsulated Loadcell

Flameproof Indicator

SS Platform Version

MS Platform Version

IP67

STANDARD FEATURES
- High resolution up to 15,000 counts.
- Stainless Steel Ultra-low profile, 45-100mm height adjustable of platform for easy weighing.
- Optional : RS 232C interface.
- Environmentally protected Load cells.
- Four Load cell structure for rugged and durable weighing.
- Ramp ON & Ramp OFF is standard in low profile scale for easy goods movability.
- Built-in rechargeable battery for continuous use.
- Hermetically sealed stainless steel capsulated load cell to IP67 specifications. (Available on S.S. Ver. only)
- SS 304 Stainless Steel structure for Washdown & Anti corrosive application. (Available on S.S. Version only)
- Handles for convenience of positioning and removal.
- Safety overload protection.
- Power AC 220V + 10% 50-60 Hz & with built-in rechargeable battery backup

Optional
- 4-20 mA Facility, Set point facility.
- RS232C Serial Interface port facility.
- Stainless steel indicator housing for washdown application.
- SS IP67 Indicator
- Built In Printing Indicator
- **Flame Proof Indicator are certified by CIMFR, Dhanbad for use in Hazardous area.**

MODEL	CTG 300 4L UMS	CTG 500 4L UMS	CTG 1T4L UMS	CTG 2T4L UMS	CTG 3T4L UMS
Capacity	300 kg	500 kg	1 Ton	2 Ton	3 Ton
Readability	50 g	100 g	200 g	500 g	1 Kg
Platform Size (mm)	600 x 600	1000 x 1000	1200 x 1200		

Non-Standard Platform Size Available on request. "UMS" suffix stands for Fully MS Platform.
"USS" suffix stands for Fully SS Platform.

Heavy Duty 4 Load Cell Platform Scale

IP67

-: Optional :-

Built in Printer Indicator

Flameproof Indicator

SS Platform Version

MS Platform Version

IP 67 SS Capsulated Loadcell

STANDARD FEATURES
- High resolution upto 15,000 counts.
- Easy to read (0.56") Bright LED / LCD display.
- Rugged construction suitable for Industrial application.
- MOC : 304L / 316L
- GMP, FDA Compliance.
- Stainless Steel Capsulated IP67 class Loadcell for Complete washdown applications.
- Auto-off Function for power saving.
- Safety overload 150% of the scale capacity.
- Dust Resistance Membranes key.
- Power AC 220V + 10% 50-60 Hz & with built-in rechargeable battery backup

Optional
- RS 232 Interface
- 4-20 mA Facility, Set point facility.
- With Ticket Printing Facility.
- SS IP67 Indicator
- Built In Printing Indicator
- **Flame Proof Indicator are certified by CIMFR, Dhanbad for use in Hazardous area.**

MODEL	CTG 1T4	CTG 1T4	CTG 2T4	CTG 3T4	CTG 5T4	CTG 5T4
Capacity	1 Ton	1 Ton	2 Ton	3 Ton	5 Ton	5 Ton
Readability	100 g	200 g	500 g	1 Kg	1 Kg	1 Kg
Platform Size (mm/inch)	1000 x 1000 / 39.3" x 39.3"	1200 x 1200 / 47.2" x 47.2" &		1500 x 1500 / 59"x 59"	2000 x 2000 / 78.7" x 78.7"	

Model : CTGxxxS" Suffix stand for Fully SS Platform
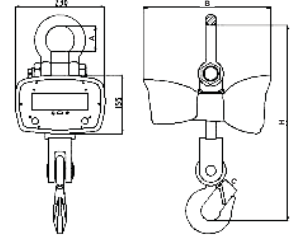
1 T to 5 T | **Anti Heat Shield** | **HA 33 TR (Wireless)**

STANDARD FEATURES
- Rugged Heavy duty design, cast Aluminium alloy housing.
- Remote control - On/Off, Change, Zero, Hold.
- Heat shield - 100°C to 1600°C at distance of approx. 2.5 mtr.

Function
- ON/OFF, Change, Zero Set
- Display : 5 digit, 1.2" RED LED
- Zero Range : 4%FS.
- Max Safety Load : 250%FS.
- Ultimate load : 500%FS.

Construction
1. High special safety construction Load cell design to protect damage overload
2. Load Cell connects to upper ring & Bottom Hook, with Non-screw safety design to prevent loosen or breakage .
3. Easy operated wireless remote control. (distance 15m approx)

Dimension:

Model	A(mm)	B(mm)	C(mm)	H(mm)	N.W.
HA33-1T	90	280	40	580	16kg
HA33-2T	90	280	40	580	16kg
HA33-3T	90	280	40	580	16kg
HA33-5T	110	280	45	670	18kg
HA33-10T	130	280	60	700	20kg

Model	HA - 33										
Capacity	300 kg	600 kg	1 Ton	2 Ton	3 Ton	5 Ton	10 Ton	15 Ton	20 Ton	30 Ton	50 Ton
Graduation	100 g	200 g	200 g	500 g	1 kg	2 kg	5 kg	5 kg	10 kg	10 kg	20 kg
Display	Rechargeable Battery 6V / 10Ah, Approx 100 Hours Backup Time.										
Power Supply	AC 230V + 10% 50-60Hz										

Flame Proof Indicator

MS Version

SS Version
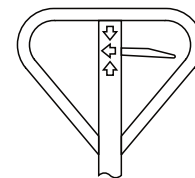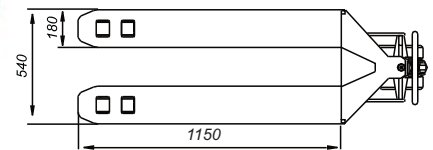
⬇ lowering
⬅ drive
⬆ lifting
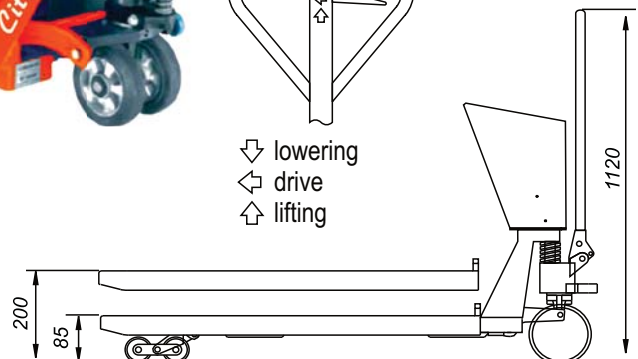
STANDARD FEATURES

- In-built battery Backup.
- Widely use in places like storehouses, warehouses, goods yard etc.
- Bright LED / LCD Display.
- Solid Caster wheel for easily moveable for convenient weighing.
- **Flame Proof Indicator are certified by CIMFR, Dhanbad for use in Hazardous area.**

Model	PT 1T	PT 2T
Capacity	1000 kg	2000 kg
Readability	1 kg	2 kg
Pan Size (mm / inch)	1150 x 560 x 85 - 200 mm	1150 x 540 x 85 - 200 mm

SS Model Series PT xxS

STANDARD FEATURES

- Designed for Control of packaged & Unpackaged Goods.
- Detecting Theory : Digital Weighing Sensor, EMFC Sensor (Optional)
- HACCP, CMP & FDA Approved
- Automatic Weighing Compensation & Zero Tracking
- Strong Stainless Steel Structure (S.S. 301) Mild Steel (Optional)
- Advance DSP Technology with Digital Signal Filter
- Based on 32 Bit High Speed CPU / Industrial PC Technology with Windows Embedded System (Optional)

- Graphical with Touch Screen Display
- Built-in Power Stabilizer
- Buzzer & Lamp Alarming with Rejectors
- 100 Products Preset; Easy to Edit & Recall
- Data Storage & Data Printout ready
- 2000 Sorting Reports
- RS-232 (Standard), USB & Ethernet Interface (Optional)
- Easy ± Tolerance Control
- Easy Interface in Existing Production Lines
- Adjustable Bolt Speed
- Belt Speed : Upto 60 m/min. (180Hz)
- Rapid Change of Belts
- Anti-Vibration Legs with Height Adjustment
- Bar Graphs,, Pie Diagrams & Statistical Data (Optional)
- Database in MS Access & SQL Server (Optional)
- Remote Monitoring of Live Operation (Optional)
- Buzzer & Lamp Alarming with Rejectors
- Control thru the Single Software for Metal Detectors, Dosing Systems, Signaling Devices, Conveyor Belts, Label / Inkjet Printers, Barcode Readers, Backup Devices, etc..... (Optional)

MODEL	CW 200	CW 1K	CW 3K	CW 10K	CW 40K
Capacity (Max.)	200g	1000g	3000g	10kg	40kg
Least Count	0.1 g	0.1 g	0.2 g	1 g	5 g
Accuracy	±0.2g	±0.5g	±1.0g	±5g	±20g
Reject Systems	Air Jet Reject / Flapper / Falling Drop / Roller with Pusher				
Working Temperature	10º to 40ºC				

MDC SERIES
Metal Detectors

: Possible Impurities :

- Detection Adjustment P: 1-100 Steps
- Strong Stainless Steel Structure (S.S. 304), Mild Steel (Optional)
- Advance DSP Technology with Digital Signal Filter
- Based on 32 Bit High speed CPU
- Improved product "Self-Learning" Functions
- Multi Function Operating System
- Graphical with Touch Screen Display
- Built-in Power Stabilizer
- 100 Products Preset; Easy to Edit & Recall
- Data Storage & Data Printout ready
- 1000 Detection Lage
- RS-232 (Standard), USB & Ethernet Interface (Optional)
- Easy Integration in Existing Production Lines
- Adjustable Belt Speed
- Belt Speed : 32 m/min. to 40m/min. (60Hz) (adjustable)
- Rejector Systems : Belt Stop, Air Jet, Pusher, Falling Drop

STANDARD FEATURES

- Designed for control of packaged & Unpackaged Goods
- Detecting Theory : Balance Coil & Electromagnetic Induction
- HACCP, GMP & FDA Approved

- Detects all Ferrous Metal & Non-Ferrous Metal, S.S., etc.
- Closed Magnetic Loop Detection Head

MODEL	MDC 3030	MDC 3535	MDC 4040	MDC 5050	MDC 6060
Tunnel Width (mm)	300	350	400	500	600
Tunnel Height (mm)	80/100/120/150/180	100/120/150/180/200	100/120/150/180/200/250	120/150/180/200/250/300	150/200/250/300/350
Sensibility (Ø, mm) Ferrous	0.4/0.4/0.6/0.8/0.8	0.6/0.8/0.8/0.8/1.0	0.6/0.8/1.0/1.0/1.3/1.6	1.0/1.0/1.3/1.3/1.6/1.8	1.0/1.3/1.6/1.8/2.3
Sensibility (Ø, mm) Non-Ferrous	0.6/0.6/0.8/1.0/1.0	0.8/1.0/1.0/1.0/1.2	0.8/1.0/1.2/1.2/1.5/1.8	1.2/1.2/1.5/1.5/1.8/2.0	1.2/1.5/1.8/2.0/2.5
Sensibility (Ø, mm) S.S. 304	1.0/1.0/1.3/1.3/1.6	1.0/1.0/1.3/1.5/1.8	1.3/1.3/1.6/1.8/2.0/2.3	1.6/1.8/1.8/2.0/2.3/2.8	1.8/2.3/2.3/2.8/3.3

LABORATORY CALIBRATION WEIGHTS
E1 / E2 / F1 / F2 / M1 Class

- According to OIML - R111-1-Standards.
- Outstanding Cost Performance Ratio.
- Quick Handling Time.
- Modern Calibration Methods Allow Exact Calibration.
- Results and Quick Processing Times.
- Calibrated by NPL / NABL / RRSL / Cofrac / NVLAP / Ukas (USA) Accredited.
- Complete Service Ranging from 1 mg to 50kg.
- E1 to M1 Class Weights with or without Certification.
- Higher Accuracy Metrological Weights.
- Material density of the weights is 8000kg / m³, air density is 1.2kg / m³ and measuring temperature is 20ºC.

E1 Stainless Steel Weights (Single)

Part No.	Mass Wt.	Tolerance ±	Certificate
106-01	1 mg	0.003 mg	100-001
106-02	2 mg	0.003 mg	100-002
106-03	5 mg	0.003 mg	100-003
106-04	10 mg	0.003 mg	100-004
106-05	20 mg	0.003 mg	100-005
106-06	50 mg	0.004 mg	100-006
106-07	100 mg	0.005 mg	100-007
106-08	200 mg	0.006 mg	100-008
106-09	500 mg	0.008 mg	100-009
107-01	1 g	0.010 mg	100-010
107-02	2 g	0.012 mg	100-011
107-03	5 g	0.016 mg	100-012
107-04	10 g	0.020 mg	100-013
107-05	20 g	0.025 mg	100-014
107-06	50 g	0.03 mg	100-015
107-07	100 g	0.05 mg	100-016
107-08	200 g	0.10 mg	100-017
107-09	500 g	0.25 mg	100-018
107-10	1 kg	0.5 mg	100-019
107-11	2 kg	1.0 mg	100-020
107-12	5 kg	2.5 mg	100-021

E2 Stainless Steel Weights (Single)

Part No.	Mass Wt.	Tolerance ±	Certificate
117-01	1 g	0.03 mg	100-031
117-02	2 g	0.04 mg	100-032
117-03	5 g	0.05 mg	100-033
117-04	10 g	0.06 mg	100-034
117-05	20 g	0.08 mg	100-035
117-06	50 g	0.10 mg	100-036
117-07	100 g	0.16 mg	100-037
117-08	200 g	0.3 mg	100-038
117-09	500 g	0.8 mg	100-039
117-10	1 kg	1.6 mg	100-040
117-11	2 kg	3.0 mg	100-041
117-12	5 kg	8.0 mg	100-042
117-13	10 kg	16 mg	100-43
117-14	20 kg	30 mg	100-44
117-15	50 kg	80 mg	100-45

F1 Stainless Steel Weights (Single)

Part No.	Mass Wt.	Tolerance ±	Certificate
127-07	100 g	0.5 mg	100-061
127-08	200 g	1.0 mg	100-062
127-09	500 g	2.5 mg	100-063
127-10	1 kg	5.0 mg	100-064
127-11	2 kg	10 mg	100-065
127-12	5 kg	25 mg	100-066
127-13	10 kg	50 mg	100-067
127-14	20 kg	100 mg	100-068
127-15	50 kg	250 mg	100-069

F2 Stainless Steel Weights (Single)

Part No.	Mass Wt.	Tolerance ±	Certificate
137-07	100 g	1.6 mg	100-085
137-08	200 g	3.0 mg	100-086
137-09	500 g	8.0 mg	100-087
137-10	1 kg	16 mg	100-088
137-11	2 kg	30 mg	100-089
137-12	5 kg	80 mg	100-090
137-13	10 kg	160 mg	100-091
137-14	20 kg	300 mg	100-092
137-15	50 kg	800 mg	100-093

M1 Stainless Steel Weights (Single)

Part No.	Mass Wt.	Tolerance ±	Certificate
147-10	1 kg	16 mg	100-094
147-11	2 kg	30 mg	100-095
147-12	5 kg	80 mg	100-096
147-13	10 kg	160 mg	100-097
147-14	20 kg	300 mg	100-098
147-15	50 kg	800 mg	100-099

E1 Stainless Steel Weights (Sets)

Part No.	Mass Wt.	Certificate
103-01	1mg - 500mg	100-501
103-03	1mg - 100gm	100-503
103-04	1mg - 200gm	100-504
103-05	1mg - 500gm	100-505
104-08	1g - 5kg	100-516

E2 Stainless Steel Weights (Sets)

Part No.	Mass Wt.	Certificate
113-01	1mg - 500mg	100-518
113-03	1mg - 100gm	100-520
113-04	1mg - 200gm	100-521
113-05	1mg - 500gm	100-522
114-08	1g - 5kg	100-533

F1 Stainless Steel Weights (Sets)

Part No.	Mass Wt.	Certificate
123-01	1mg - 500mg	100-535
123-03	1mg - 100gm	100-537
123-04	1mg - 200gm	100-538
123-05	1mg - 500gm	100-539
124-08	1g - 5kg	100-550

F2 Stainless Steel Weights (Sets)

Part No.	Mass Wt.	Certificate
133-01	1mg - 500mg	100-552
133-03	1mg - 100gm	100-554
133-04	1mg - 200gm	100-555
133-05	1mg - 500gm	100-556
134-08	1g - 5kg	100-567

CPR 02 SERIES
Statistical Data Printer

Date & Time Password Protection

CITIZEN STATISTICAL PRINTER is ideal for routine laboratory application with following features.

ISO/GLP compliant recording capability for printouts.

GLP : Good Laboratory Practice Password-protected menu lock.

We have the parameter pertaining to the ambient weighing conditions printed before (GLP header) and after (GLP footer) the values of a weighing series. These parameters include:

GLP header :
- Date
- Time at beginning measurement
- Balance manufacturer
- Balance model
- Balance serial number
- Software version number
- Identification number of the current sampling operation

GLP Footer:
- Date
- Time at end of measurement
- Field for operator signature
- ID designations are configured as follows setup: Printout : Identification codes.
- ISO/GLP compliant recording capability for printouts.

PRINT FORMATS

```
01:          50.000 g
02:         100.000 g
03:         150.000 g
04:         200.001 g
-----------------------------
n                    4
x̄            125.0003 g
s             64.5501 g
srel            51.63 %
Σx           500.001 g
min           50.000 g
max          200.001 g
Diff         150.001 g
-----------------------------
25-Mar-2010      3:33:46
```

GLP PRINT FORMATS

```
22-Mar-12        11:13AM
         Citizen
Model            CX 220
Ser. no.        9021107
Ver. no.         r0.1.04
ID              1234567

Calibration:    Internal

W-ID          ............
Temperature     29.378'C
Set          + 200.0000g
Diff.          -0.0031g


Internal Cal Done
Diff.           0.0000g

22-Mar-12        11:13AM
Name :
              ............
```

Universal Interface can connect to Citizen & any other brand

Model	CPR 02
Features	Date & Time (Password Protection), Statistic & totalization function
Printer	Dot Matrix Pinter
No of Characters per line	24 Character
Printing Speed	Faster than 1 line per second
Paper Type	Normal Paper Roll, Wood Free Paper
Paper size	Width : 57.5 ± 0.5mm.
Power Supply	AC Adapter, 100 - 270V AC, 50Hz - 60Hz
Interface	RS 232C
Bound Rate (Selectable)	1200, 2400, 4800, 9600, 19200
Parity (Selectable)	None, Space, Odd, Even
Data Bit	8 Bit
Stop Bit	1
Working Temperature	5°C to 50°C, relative humidity : 10% - 80% (no condensation)
Dimensions (mm/inch) (LxWxH)	210 x 135 x 88.5 / 8.30" x 5.30" x 3.50
Net Weight / Gross weight	2.00 kgs / 2.5 kgs
Packing Size (mm/inch)	270 x 200 x 175 / 10.62" x 7.8" x 6.90"

Ultrasonic Cleaner/Bath

CUB 5

CUB 10 ~ 30

CITIZEN Ultrasonic units are used in Industrial and Analytical Laboratories. With their high power, optimized parameter settings and strict parameter monitoring and assisted by a large range of useful accessories the ultrasonic units guarantee safe and reliable results for the multifaceted laboratory applications. The **CITIZEN** Laboratory equipment is complete with a full programme of cleaning chemicals developed and produced in our own laboratory.

Application :
Laboratory
Get consistent cleaning with every cycle. Our Ultrasonic baths throughly remove blood, protein, and contaminants. Use it for everything from glassware to lenses to instruments and precision components.

Beyond Cleaning
CITIZEN ultrasonic cleaners are extremely versatile. They can also be used in laboratory applications for cell separation, mixing emulsifying, sample preparation and degassing of liquids.

Electronics
Get a safe, unwavering cleaning for even the most delicate of components. CITIZEN baths completely remove flux and contaminants from such precision parts as PC boards, SMDs, quarts crystals, capacitors, and many others.

Jewellery
See the difference and performance of CITIZEN ultrasonic baths. Thoroughly clean and restore brilliance to watches, chains and charms, settings, coins, fine

Industrial
The demands of light industrial workflow require an ultrasonic bath that can stand up to the challenge. Our baths are perfect for deep cleaning to remove dirt, grease, waxes, and oils from light industrial parts and components of all kinds - including steel, light & nonferrous metals, plastic and glass. jewellery and clockworks of every type.

Optional : Degas Function available on request.

Chemical Lab   Pharma   Dental Clinic

Showrooms   Factory   Repair Shop

Model	CUB - 2.5	CUB - 5
Capacity	2.5 Ltr.	5 Ltr.
Input	110/220VAC, 50/60Hz	
Frequency	40KHz Ultrasonic power 120W	
Adjustable Time	1 to 99 minutes	1 to 99 minutes
Adjustable Temperature	20°C to 80°C	20°C to 80°C
Heater Power	50 W	120W
Tank Size (mm)	150 x 137 x 150	240 x 140 x 150
Packing Size (mm)	250 x 200 x 250	350 x 250 x 330
Gross Weight	4.2 kg	5 kg

Model	CUB - 10	CUB - 20	CUB - 22	CUB - 30
Capacity	10 Ltr.	20 Ltr.	22 Ltr.	30 Ltr.
Input	110/220VAC, 50/60Hz			
Frequency	40KHz Ultrasonic power 120W			
Adjustable Time	1 to 99 minutes	1 to 99 minutes	1 to 99 minutes	1 to 99 minutes
Adjustable Temperature	20°C to 80°C	35°C to 80°C	35°C to 80°C	35°C to 80°C
Heater Power	240W	600W	600W	600W
Tank Size (mm)	300 x 240 x 150	500 x 300 x 150	500 x 300 x 150	500 x 300 x 200
Packing Size (mm)	440 x 405 x 390	640 x 450 x 390	640 x 450 x 390	640 x 450 x 390
Gross Weight	11 kg	21 kg	21 kg	31 kg

Analytical Process Lab Instruments

Electronic Densimeter

Visible Spectrometer

UV/VIS Spectrometer

Rotary Evaporator

Milk Analyzer

Digital ABBE Refractometer

Tablet Hardness Tester

Precision Dissolved Oxygen Meter

Colorimeter

Automatic Polarimeter

Water Purification System

ICE Flake Maker

PCR-I Thermal Cycler

Digital Magnetic Hotplate Stirrer

Melting-Point Apparatus

Coating Thickness XRF Analyzer

-: Optional Accessories :-

Antistatic Ionizer	Laboratory Holders	Temp. Kit	Density Kit	Flameproof Encloser
Anti Vibration Table	Remote Display	Battery Backup	IQ/OQ/PQ Documents	

-: Our Precious Client :-

GEO CHEM | Cipla | Ipca | LUPIN | SUN PHARMACEUTICAL INDUSTRIES LTD.

TITAN LABORATORIES | SGS | NOVA Chemicals | Galpha Laboratories Limited | ICAR

BHEL | cmpdi Central Mine Planning & Design Institute Limited | TÜV SÜD | BARC | Gujarat Pollution Control Board Gandhinagar

RCF | IndianOil | NTPC | adani | NHPC

SAIL | Sika | GIRNAR | TNMSC | SIEMENS

Mahindra | TATA | ESSAR | ADITYA BIRLA GROUP | Reliance Industries Limited

JINDAL STEEL & POWER | KALPA-TARU | LARSEN & TOUBRO LIMITED Engineering Construction & Contracts Division | Godrej | usha martin

ALSTOM | Pidilite | WESTCOAST GROUP | RMC | DHL