



 Cole-Parmer®

SYMMETRY™ BALANCES

LOW-COST, HIGH-ACCURACY
BALANCES FOR ANY APPLICATION



Symmetry®

ISO9001:2008
CERTIFIED SUPPLIER

2 year
warranty



Symmetry® Balances

HOW CAN SYMMETRY OFFER SUCH A QUALITY PRODUCT FOR UP TO 50% LESS THAN THE HIGH-PRICED BRANDS?!

Cole-Parmer's new Symmetry balances are designed to meet your budget as well as your every application need. They are not loaded with unnecessary and costly features your lab will never use—only those features you could never do without. Symmetry balances are accurate, dependable, and durable; a truly practical solution for your laboratory.

PERFORM WEIGHING TASKS MORE EFFICIENTLY

Save staff time and money. Symmetry balances offer uncomplicated operation with straightforward functionality.

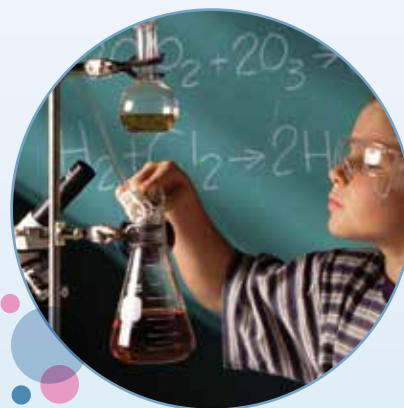


RUGGED DEPENDABILITY FOR LONG-TERM COST SAVINGS

All Symmetry balances are made of high-quality materials and are manufactured in accordance with strict guidelines to build in quality. They provide years of trouble-free operation.

A BALANCE FOR EVERY APPLICATION

With four models to choose from, there is a Symmetry balance for every laboratory need. Whether you select a basic portable unit for simple weighing tasks or an advanced analytical balance for weighing critical chemical reagents, Symmetry can answer any challenge.



THE SYMMETRY™ LINE OF OUTSTANDING BALANCES

ED PORTABLE TOPLOADING

Symmetry ED-series balances offer easy, three-button operation, optional battery power for complete mobility, and a security bracket to prevent theft—the perfect solution for basic weighing in general laboratory or educational settings.



New ECII PORTABLE TOPLOADING

Symmetry ECII toploading models are available at an exceptionally low price but with functionality that includes an RS-232 interface, draft shield, below-balance weigh hook, and internal rechargeable battery—ideal for all general laboratory or industrial settings.



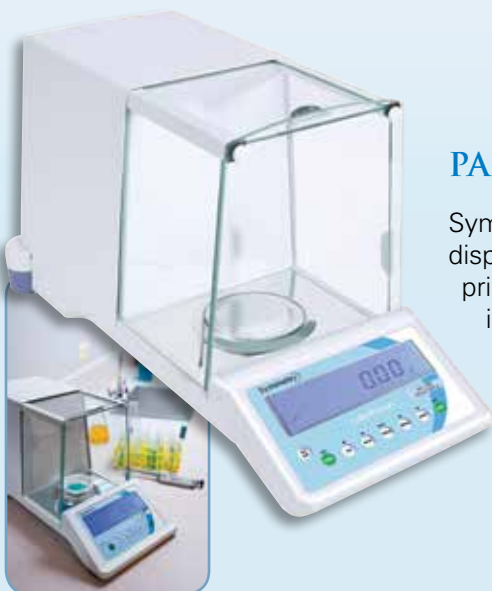
PR PRECISION TOPLOADING

Symmetry PR precision toploading balances display readouts in English, French, German, and Spanish, while offering password protection for security, draft shield protection against air currents, and automatic temperature compensation for accuracy—a precision instrument affordable on any laboratory's budget.



PA PRECISION ANALYTICAL

Symmetry PA precision analytical units offer a multilanguage display and readability to four decimal places. GLP-compliant printouts with date, time, and balance number make these instruments ideal for any industry or pharmaceutical lab needing accuracy and documentation.



Symmetry™ ED Portable Toploading Balances

COMPACT PORTABLE BALANCES FOR EVERYDAY WEIGHING APPLICATIONS

Choose from six models with increasing capacities and up to seven of the most commonly used weighing units. These balances are the perfect solution for educational classrooms and general laboratories requiring a basic, affordable balance for weighing samples. With simple three-button operation, Symmetry ED-series balances are easy to operate so users will spend more time on the important tasks of weighing samples and completing experiments.

AC or battery powered—powered by an AC adapter with 6-ft cord, or by six AA batteries for portability

Security bracket—prevents unauthorized movement or theft in labs with frequent traffic and multiple users

5"-dia Stainless steel weigh pan—tolerates common laboratory chemicals; round surface area is less vulnerable to air drafts for better accuracy

Faceplate-mounted level indicator—provides level status at a glance

Easy-to-use keypad—three-button design simplifies operation

Balance description—straightforward description of model, capacity, and readability to avoid confusion in labs or classrooms with multiple weighing stations



Model	ED Portable Toploading Balances					
120 VAC	ML-10000-01	ML-10000-02	ML-10000-03	ML-10000-04	ML-10000-05	ML-10000-06
220 VAC	ML-10000-17	ML-10000-18	ML-10000-19	ML-10000-20	ML-10000-21	ML-10000-22
Maximum capacity	150 g	300 g	500 g	1200 g	2000 g	4000 g
Readability	0.01 g	0.1 g	0.1 g	0.1 g	0.1 g	1 g
Repeatability	0.02 g	0.1 g	0.1 g	0.2 g	0.2 g	1 g
Linearity	±0.02 g	±0.1 g	±0.1 g	±0.2 g	±0.2 g	±1 g
Units of measure	g, ct, oz, dwt, tael(3)		g, ct, oz, dwt		kg, g, lb, oz	
Stabilization time	≈3 seconds			≈2 seconds		

New Symmetry® ECII Portable Toploading Balances

ECONOMICAL INSTRUMENTS WITH MORE VERSATILITY AND GREATER PRECISION

Symmetry ECII-series balances are designed for laboratories that need an affordable, accurate balance with additional weighing features. Fifteen different units of measure support your more demanding weighing requirements.

- **AC or battery powered**—powered by an AC adapter with 6-ft cord, or by a built-in internal rechargeable battery for portability; auto-power off feature helps preserve battery life
- **Popular weighing functions**—parts counting, percent weighing, and accumulation



Model	ECII Portable Toploading Balances				
120 VAC	ML-20000-07	ML-20000-08	ML-20000-10	ML-20000-09	ML-20000-11
220 VAC	ML-20000-27	ML-20000-28	ML-20000-30	ML-20000-29	ML-20000-31
Maximum capacity	120 g	400 g	800 g	2000 g	4000 g
Readability	0.005 g	0.01 g	0.01 g	0.05 g	0.1 g
Repeatability	0.005 g	0.01 g	0.01 g	0.05 g	0.1 g
Linearity	±0.01 g	±0.02 g	±0.04 g	±0.1 g	±0.1 g
Units of measure	g, ct, lb, oz, d, grain, ozt, dwt, g2, momme, Newton, tical, tael(3)				
Stabilization time	≈2 seconds				

Symmetry™ PR Precision Toploading Balances

OUR BEST VALUE FOR QUALITY AND SECURITY IN THE LABORATORY

- Password protection prevents unauthorized usage and loss of saved balance settings
- Durable metal housing and sealed keypad protect internal components from the harshest laboratory conditions and chemicals
- Automatic temperature compensation (ATC) adjusts balance calibration when internal temperature exceeds preset limits—ensuring accurate measurements each and every time

RS-232 Interface—meet GLP-compliance with printouts that feature time, date, balance number, and verification of calibration



Draft shield—the 210- and 410-g models include a draft shield that eliminates wind drafts and provides greater accuracy and protection when weighing smaller samples



Oversized backlit display—large, easy-to-read LCD with 24-mm-tall digits provides readouts in English, French, German, and Spanish to accommodate more users

Below-balance hook—perform density determination applications or specific gravity calculations



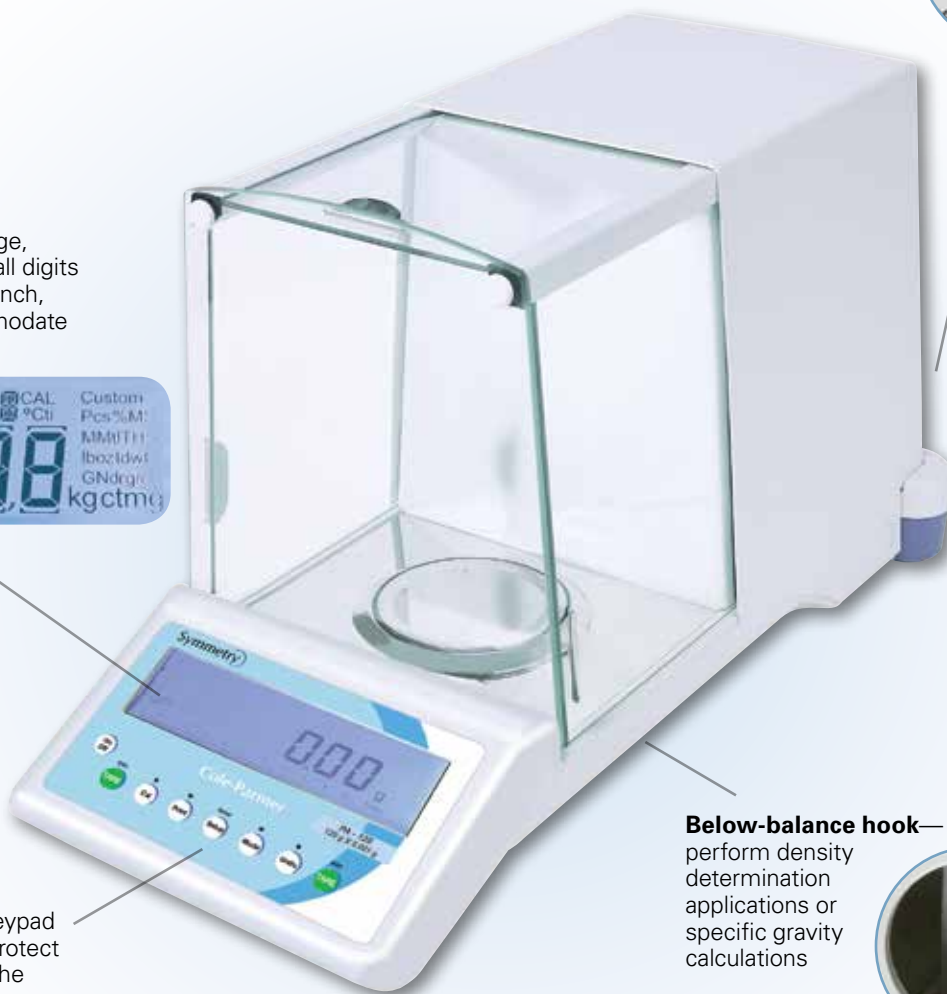
Model	PR Precision Toploading Balances			
120 VAC	ML-10000-11	ML-10000-12	ML-10000-13	ML-10000-14
220 VAC	ML-10000-31	ML-10000-32	ML-10000-33	ML-10000-34
Maximum capacity	210 g	410 g	2200 g	4400 g
Readability	0.001 g	0.001 g	0.01 g	0.01 g
Repeatability	0.02 g	0.001 g	0.01 g	0.01 g
Linearity	±0.02 g	±0.001 g	±0.01 g	±0.01 g
Units of measure	g, mg, kg, ct, dwt, grain, oz, ozt			
Stabilization time	≈2 seconds			

Symmetry™ PA Precision Analytical Balances

TOP-PERFORMING ANALYTICAL INSTRUMENTS WITH MICROGRAM ACCURACY

- Cost effective at up to 50% less than comparable brands
- A three-door glass draft shield, internal calibration, and automatic temperature compensation (ATC) ensure accurate performance when weighing samples as small as 0.1 mg
- RS-232 interface helps you meet GLP compliance or FDA requirements; keep records with printouts that feature time, date, balance number, and verification of calibration

Oversized backlit display—large, easy-to-read LCD with 24-mm-tall digits provides readouts in English, French, German, and Spanish to accommodate more users



Sealed keypad—sealed keypad and robust metal housing protect internal components from the harshest laboratory conditions

Below-balance hook—perform density determination applications or specific gravity calculations



Model	PA Precision Analytical Balances	
120 VAC	ML-10000-15	ML-10000-16
220 VAC	ML-10000-25	ML-10000-26
Maximum capacity	120 g	220 g
Readability	0.0001 g	
Repeatability	0.0002 g	
Linearity	± 0.0002 g	
Units of measure	g, mg, kg, ct, dwt, grain, oz, ozt	
Stabilization time	≈2 seconds	

In the U.S.

625 E. Bunker Court
 Vernon Hills, IL 60061
 Call toll-free 800-323-4340
 Phone: 847-549-7600
 Fax: 847-247-2929
www.coleparmer.com

In Canada

Call toll-free 800-363-5900
 Phone: 514-355-6100
 Fax: 514-355-7119
www.coleparmer.ca

In the United Kingdom

Free phone: 0500-345-300
 Phone: 020-8574-7556
 Fax: 020-8574-7543
www.coleparmer.co.uk

In India

Phone: 91-22-6716-2222
 Fax: 91-22-6716-2211
www.coleparmer.in

International customers

Call 847-549-7600 to reach our
 International Sales Department
 or contact your local dealer.



**FREE TECHNICAL
 APPLICATIONS ASSISTANCE!**

PERFORMANCE SPECIFICATIONS



Symmetry™ model	ED Series Portable Toploading	EC Series Portable Toploading	PR Series Precision Toploading	PA Series Precision Analytical
Capacity range	150 to 4000 g	120 to 4000 g	210 to 4400 g	120 to 220 g
Readability range	0.01 to 1.0 g	0.005 to 0.1 g	0.001 to 0.01 g	0.0001 g
Calibration	Automatic external with mass	Automatic external with mass	Automatic external with mass	Internal calibration
Weighing units	4 (plus 3 taels on 150 g model)	15	8	8
Stabilization time	≈3 seconds	≈2 seconds	≈2 seconds	≈2 seconds
Languages	English	English	English, French, German, Spanish	English, French, German, Spanish
Parts counting		●	●	●
Percent weighing		●	●	●
Checkweighing			●	●
Below-balance weighing			●	●
Automatic temperature compensation (ATC)			●	●
RS-232 interface		●	●	●
Print function		●	●	●
Date/time recording and display			●	●
Lockdown point	●	●	●	●
Password protection			●	●
Draft shield		●	●†	
Housing construction	ABS plastic	ABS plastic	Die-cast metal	Die-cast metal
Housing dimensions	7¾"W x 2⅞"H x 9¾"D	7¾"W x 2⅞"H x 9¾"D	10"W x 10¼"H x 20"D	10"W x 10¼"H x 20"D
Pan size	5" dia	5" dia	5½" x 5½", 7½" x 7½"	3½" dia
Display	6-digit LCD with backlight, 15 mm	6-digit LCD with backlight, 16 mm	7-digit LCD with backlight, 24 mm	7-digit LCD with backlight, 24 mm
Power	AC adapter or six AA batteries	AC adapter or six AA batteries	AC adapter	AC adapter

†Present on 210- and 410-g models.