Avery Weigh-Tronix

PC-902/905 High Precision Counting Scale

An easy-to-operate, no-nonsense digital counting scale that weighs extremely light parts and reduces the time required to count, with accuracy of up to 99%.

M anufacturers and suppliers of small components for computers, communications equipment, electronics and other products know the importance of accurate counting and weighing. Counting parts that are so small and light that they can barely be seen is a daunting and time-consuming process that is prone to error.

Now even small-component manufacturers and suppliers have a counting scale alternative that ensures accuracy and reduces time required to count parts. The Avery Weigh-Tronix PC-902 and PC-905 digital counting scales have the ability to weigh parts as light as 0.00001 lbs. in less time with accuracy up to 99%.

The Importance of Accuracy to your Business

Companies need counting scales for inventory and quality control.

Achieving inventory control requires a delicate balance. Too much inventory is money sitting on the shelf that could be put in the bank. Too little inventory means manufacturing down time and missed shipments. An accurate parts inventory leads to greater efficiency at a lower cost — essential for every industry.

Maintaining quality control is also critical. Companies want to give their customers exactly what they paid for. Time and again, shipping less than ordered leads to dissatisfaction and lost customers. Accuracy translates to freeing up of capital and satisfied customers.

PC-902 with draft sheild.

Which Scale is Right for Your Company?

Avery Weigh-Tronix, the inventor of the electronic counting scale, continues to lead the market with innovative technology at affordable prices. As you are evaluating scales, ask yourself the following:

1. **Is it easy to operate?** A counting scale that is difficult to operate or requires multiple keys strokes leads to confusion and inaccuracy—the reason you purchase a counting scale in the first place. Avery Weigh-Tronix counting scales are simple, flexible and easily operated with one keystroke.

2. **What is the risk of operator error?** Increasing the number of parts hand-counted during the sampling process increases the risk of human error. The PC-902/905 will not allow counting to continue until there is an adequate sample size (0.02% of scale capacity) to get to the accuracy rate you select.

3. **How accurate is the scale?** Counting scales with different internal resolutions have different levels of accuracy. It's like measuring the diameter of a steel bar in ¼ inch increments, $\frac{1}{8}$ inch increments or a micrometer. Avery Weigh-Tronix counting scales use T750 Vibrating Beam Load Cell technology to achieve superior count performance and unequaled internal resolution and accuracy.

Top-of-the-Scale Customer Support.

The Avery Weigh-Tronix authorized distributor network provides local service and complete technical support throughout the world. These experienced distributors are not only scale specialists, but are dedicated to helping you keep your business running as smoothly as possible.

The PC-902 and PC-905 are easy-to-operate, no-nonsense digital counting scales that weigh extremely light parts and reduce the time required to count, with accuracy of up to 99%. Ask your distributor for more information about these high-precision scales.

The Choice is Yours

Choose from either the PC-902 or PC-905 depending on your specific application.

PC-905

Remote Base Switching: Automatically switches from internal (local) base to the optional remote base after a sample is performed.

Full Keypad: Lets operators enter and recall known piece weights and tare weights.

PC-905 with optional remote base.

PC-902 with optional barcode gun and printers.

PC-902

Operator Friendly: Simple one-keystroke operation ensures correct use. Three yellow keys draw operator to most used keys: ZERO, TARE and SAMPLE. The SAMPLE key automatically zeroes the scale, prior to weight being applied.

Features and Benefits of Both Scales:

Printer Ready: Comes ready to connect to bar code label printer, eliminating the need to continually sample. Includes 14 label formats: 8 AWT dot matrix printers, 3 Dymo Costar and 3 Zebra Model 2844.

RS232 Output: Standard link to printers, bar code gun/ wands or computers.

Two Power Saving Modes: Puts the scale to "sleep" when not operating and allows extended battery operation.

Calibration: Front panel access, including 2 alternate calibration weight selections.

Backlit Displays: Increases visibility in poorly lit areas.

Count Methods: Bulk, dribble, multiple reverse count methods, piece weight entry.

Options For Both Scales:

Internal Battery Operation: Internally mounted 6V battery offers up to 50 hours of continuous operation and up to 500 discharge/recharge cycles.
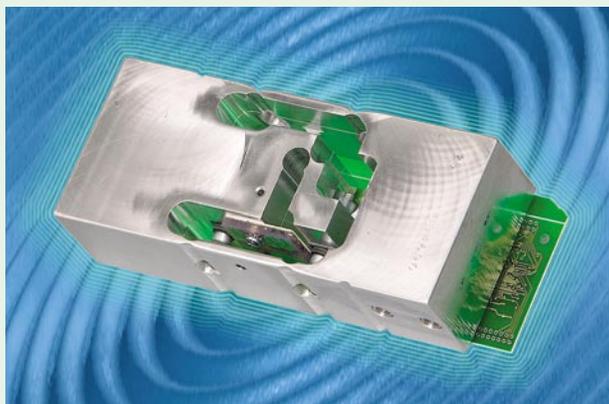
External Battery Operation: Mounted underneath the PC-905 offering up to 20 hours of continuous operation. Spare battery packs can be changed quickly for continuous battery operation.

Remote Battery Charger: Charges two external batteries at the same time.

9" and 18" Remote Display Column: Includes 5-10' cable.

Ball Top Kit: 12 x 14 platforms only, stainless steel using 9 roller balls.

Draft Shield: Recommended for use on 10-lb. models to reduce external interference.

Vibrating Beam® Digital Transducer

The revolutionary pure digital transducer uses 25 million counts to provide the internal resolution of 2 million. This superior resolution allows the PC-902 and PC-905 to count with unparalleled accuracy. You can also count smaller parts with greater accuracy using smaller sample sizes. The T750 Vibrating Beam Load Cell technology provides:

▶ Higher resolution than traditional analog load cells, up to 12,500 divisions type approved

▶ Load cell capacities of 5, 12, 25 and 50 kg.

▶ More durability than other high-resolution load cells

Product Specifications

Capacity and Resolution:

Capacity Pounds	Available count by values				
	Optional	Approved	Counting	Optional	Optional
10	.002	.001	.0005	.0002	.0001
25	.005	.002	.001	.0005	.0002
50	.01	.005	.002	.001	.0005
100	.02	.01	.005	.002	.001

Capacity Kilograms	Available count by values				
	Optional	Approved	Counting	Optional	Optional
5	.001	.0005	.0002	.0001	.00005
12	.002	.001	.0005	.0002	.0001
25	.005	.002	.001	.0005	.0002
50	.01	.005	.002	.001	.0005

Capacity Grams	Available count by values				
	Optional	Approved	Counting	Optional	Optional
5000	1	.5	.2	.1	.05
12000	2	1	.5	.2	.1
25000	5	2	1	.5	.2
50000	10	5	2	1	.5

Capacity Ounces	Available count by values				
	Optional	Approved	Counting	Optional	Optional
160	.05	.02	.01	.005	.002
400	.1	.05	.02	.01	.005
800	.2	.1	.05	.02	.01
1600	.5	.2	.1	.05	.02

Internal Resolution: 1:2,000,000.

Counting Resolution: Factory default of 1:25,000, adjustable up-to 1:100,000.

Type Approved Resolution: Up to 12,500 divisions.

PC-905 Remote Base Capacity:
Pounds: 50, 100, 200, 250, 300, 500, 1000, 2000, 2500, 5000, 10,000 and 20,000.
Kilograms: 25, 50, 100, 125, 150, 250, 500, 1000, 1250, 2500, 5000, and 10,000.

Dimensions:

Weighing Platform:
12.6" X 14.08" (31.5 x 35.75 cm) 25, 50 & 100 lb capacity
8" (20.3 cm) diameter, 10 lb capacity

Display Assembly:
PC-905 –12.86" x 6.31" (32.65 x 16.02 cm)
PC-902 – 9.5"x 2.75" (25.1 x 6.9 cm)

Overall Dimensions:
PC-905 – 17.50" x 14.08" x 4.25-5.40" (44.5 x 35.75 x 10.8–13.7 cm)
PC-902 – 15.25" x 14.08 x 4.25-5.40 (38.7 x 35.75 x 10.8–13.7 cm)

Construction: Die-cast aluminum base and load bridge, stainless steel weight platter. *PC-905:* ABS plastic display assembly. *PC-902:* extruded aluminum.

Display: Large 0.5" H 7-digit / 7-segment backlit LCD display.

Keypad:

PC-905 - 20 keys: Sample (on/off), tare, zero, count/weight switching, print (transfer data), units of measure switching, average piece weight, clear, recall/decimal point, remote base toggle, and numeric keypad.

PC-902 – 6 keys: Sample (on/off), tare, zero, count/weight switching, print (transfer data), units of measure switching,

Counting Accuracy: Selectable from 95%, 98%, 99%.

Power Saver Modes: Selectable modes of 5, 10, 20, 30, and 60 minutes for auto shut-off and adjustment of backlight to auto, or off to increase battery performance.

Power Supply :

Standard: 120 Vac +10% -15% standard 3 wire w/ground @ 60 Hz ± 3 Hz
9 VDC @ 1.3 Amps DC minimum – UL approved

Optional: 230 Vac +10% - 15% with universal connector @ 50 Hz ± 3 Hz
9 VDC @ 1.8 Amps DC minimum – CE approved

Internal / External Battery: Sealed lead acid with full charge value of 6.8 ± .1 volts at 2.8 AH (external) 7.0 AH.

Operating Environment:
+5 to 40 degrees C (Class III Device)
+5 to 35 degrees C (Class II Device)
10 to 90% RH, non-condensing

Agencies:
NTEP 12,500 divisions pending, Class II
OIML 6,000 divisions pending, Class III
UL, CSA, EN 60950

Avery Weigh-Tronix

Fairmont, Minnesota U.S.A.
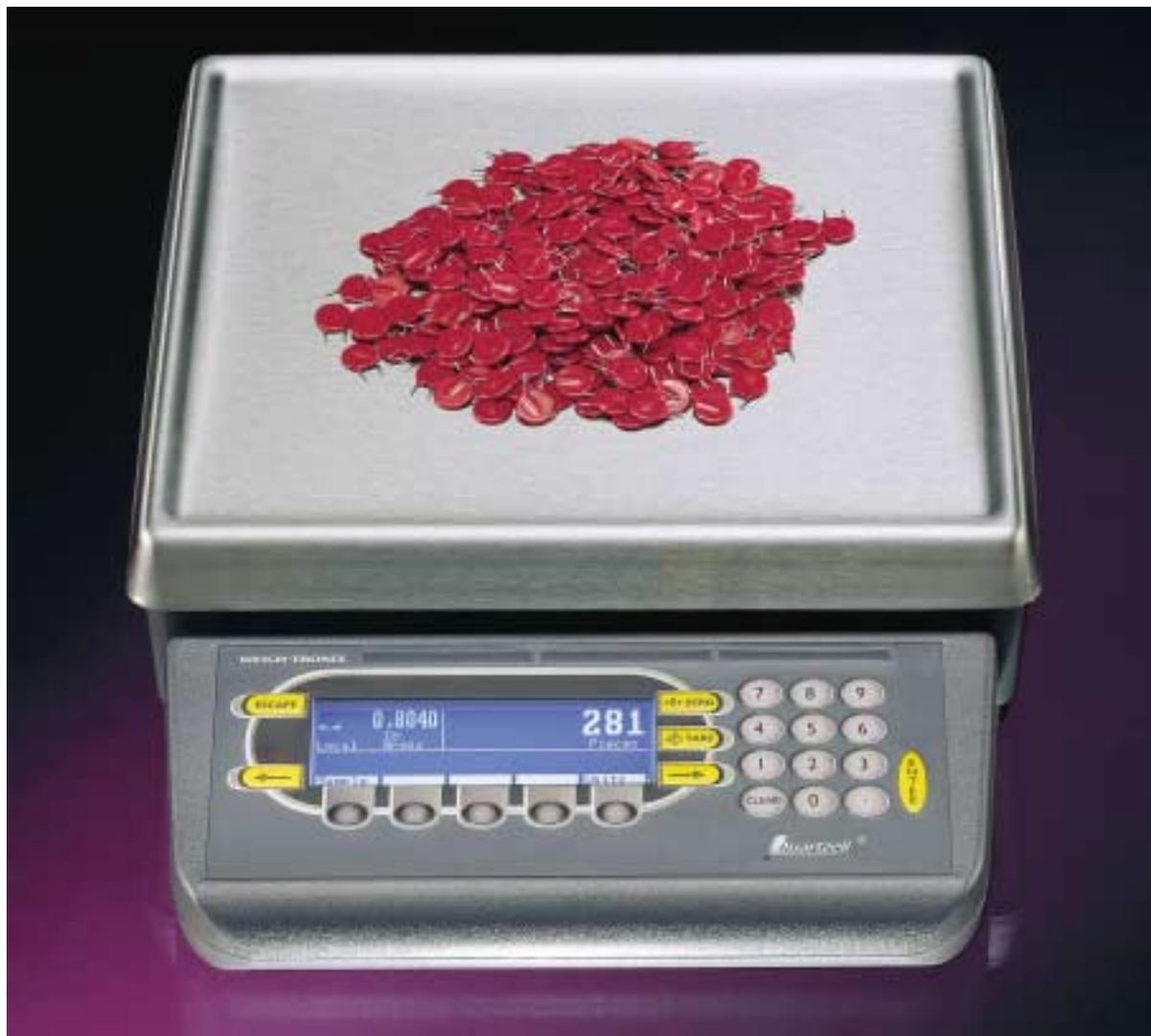USA Toll-Free: 800-368-2039
USA Phone: 507-238-4461
www.wtxweb.com

Pointe Claire, Quebec Canada
CAN Toll-Free: 800-561-9461
CAN Phone: 514-695-0380
www.weigh-tronix.ca

ISO 9001
Avery Weigh-Tronix is an Registered Company

WEIGH-TRONIX®

Accurate.
Simple.
Adaptable.
Amazing.

Exclusive Quartzell® digital technology defines a highly precise method of counting that's not available anywhere else.

PC-820 Counting Scale

Better counting
means a better bottom line.

The closer you can get to a perfect parts count, the closer you can get to just-in-time inventory. Which will then give you greater manufacturing efficiencies, quicker turnaround, and improved profits. Owning a Weigh-Tronix Quartzell® PC-820 counting scale makes the difference.

National Controls, Inc. (NCI), acquired by Weigh-Tronix in the 1980s, is the company that brought you the first electronic counting scale — a significant milestone in accuracy. Now we bring you the advanced accuracy of Quartzell technology, teamed with ease-of-use and flexibility.

Why Quartzell Technology is Better

- Unlike traditional load cells, Quartzell load cells are completely digital — no analog components to slow down, corrupt or interfere with weight sensing.

- Usable internal resolution of 1 part in 2 million — provides more precise piece weights.

- Quartz crystals have proven their accuracy — from wristwatches to computers.

Rely on the ultimate in accuracy.

Quartzell load cells are the only transducers in the industry with the high accuracy and reliability of crystal technology. Quartzell has the double benefit of being more accurate than analog, at an extremely competitive price.

So simple, it increases productivity from the start.

Ease-of-use is critical to the success of any counting scale, so we've made the PC-820 a model of simplicity. Even with multiple shifts and personnel changes, users will quickly feel confident in all phases of its operation.
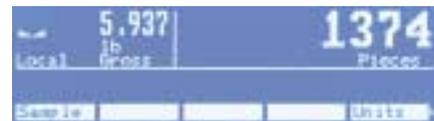

Prompts give easy-to-follow instructions.

Easy-to-read display. Instructions in the prominent display window lead employees through the use of every function, with easy-to-follow directions and prompts.

The backlit dot-graphic display features 63 different contrast settings.

A quick keystroke makes the adjustment to high or low lighting conditions with no interruption of work.

"Soft keys" tailor functions to your needs. Five separate keys — we call them "soft keys" — let you personalize the scale to your individual applications. Easily changed, they direct the scale to perform as many or as few of the functions as you need for a specific task. As a result, operators push fewer keys, and are not faced with a confusing selection of functions that don't apply to their job.
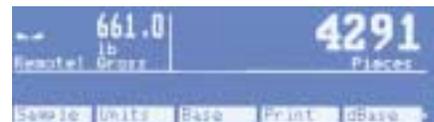

Configure soft keys to only those functions needed for your specific application.

Built-in adaptability gives you more for your money.

To be truly valuable, a counting scale needs to do more than just count. The PC-820 is flexible enough to adapt to being part of a variety of configurations.

So, rather than buying a new scale when your needs change, simply reprogram the soft keys to add additional capabilities — such as remote base operation, accumulation of counts, data base information and more.

Add soft key functions as your needs change.

WEIGH-TRONIX

As one of the world's leading manufacturers of premium scales, Weigh-Tronix has been a pioneer in focusing on the development of precision electronic weighing devices and systems.

With its battery options, the PC-820 also powers a bar code gun or wand for complete portability in cycle-counting applications. Its extensive database lets you keep inventory information right in the scale.

For shipping and receiving applications, the PC-820 interfaces with a variety of peripheral equipment.

Configure a system to fit your exact needs, with a variety of Quartzell and analog bases.

Put cycle-count information at your fingertips. Store as many as 1000 records (up to 2,000 with expanded memory) with an internal database. Each record has enough room to include 16-character part number, 32-character description, tare weight, and various numeric fields. As a result, you can maintain part and count information in the scale. When you need it, it can be quickly and easily recalled, printed, and transmitted for further use.

Weigh-Tronix also offers an optional Piece Weight Lookup Inventory Control Program (PWLU) to connect up to 32 scales to your computer when more memory is needed to store your entire inventory.

Interface with any serial printer.
A customized program makes any brand of printer compatible with the PC-820. Your distributor can tailor and deliver the program directly to you. If you change printers, the distributor can adjust the program for you.

Scan bar codes. Get fast piece weights without keying them in or going through the sample process. The PC-820 powers either a bar code gun or wand.

Access a remote base.
For applications that demand it, the PC-820 expands to a dual or triple base system. Just add an optional Quartzell base, and/or an analog deck scale.

Enjoy complete portability.
With both internal and external battery options, the PC-820 is ready to be moved right to the job, instead of forcing you to move the job to the scale. Store cycle-count information with a bar code scanner even when you're in the most remote corners of a warehouse, and download later to a computer.

Customer support that rates at the top of the scale.

The Weigh-Tronix authorized distributor network provides local service and complete technical support throughout the world. These experienced distributors are not only scale specialists, but are dedicated to helping you keep your business running as smoothly as possible.

The PC-820 is a member of our family of advanced programmable instruments. Ask your distributor about custom programs for using the PC-820 in more complex applications.

For more than 25 years, we've been committed to providing our customers with the highest quality and innovation in both products and service. That is our tradition. And, it is our driving force for the future.

Specifications

Scale Capacity	Standard Resolution	Expanded Resolution
10 lb	.001 lb	.00005 lb
50 lb	.005 lb	.0002 lb
100 lb	.01 lb	.0005 lb
5 kg	.0005 kg	.00002 kg
25 kg	.002 kg	.0001 kg
50 kg	.005 kg	.0002 kg

Power input (inline transformer):
115 VAC, 50/60 Hz
Optional 230 VAC, 50/60 Hz

Operational keys: Zero, Tare, Enter, Escape, Clear, 0-9, Decimal Point, Previous, Next, and 5 Soft Keys

All keys provide users with tactile and (configurable) audio acknowledgment when they are activated

Operational annunciators: Display symbols include Stability, Active Tare, Current Base, Center of Zero, Low Battery, Unit of Measure and Display Label

Display:
240 x 64 dot matrix LCD display
5" x 1.33" displayable area
PC-820: Cold cathode fluorescent backlit (white on blue)

Display rate:
Selectable, 0.1 to maximum readable updates

Units of measure: Pounds, kilograms, grams, ounces, pounds and ounces, and two fully custom units of measure

Displayed resolution: Up to 1 part in 500,000

Time and date: Battery protected real time clock

Internal resolution:
Quartzell: 1 part in 2,000,000
Analog (optional): 1,000,000 counts analog

Harmonizer digital filtering:
Fully selectable to ignore noise and vibration

Memory: Capable of storing 1,000 records (2,000 with expanded memory) including part number (16 char), description (32 char), count accumulator, tare, and piece weight.

Power saving: Scale has 2 power-saving timers; one controls backlight and another has capability of shutting the scale off. Any keypress wakes the scale.

Standard input and output:
- Com1: RS-232 or RS-485; can be used for printing or bi-directional communications.
- Com2: RS-232; bi-directional port or capability of connecting to a serial keyboard (TTL or RS-232), scanner, and printer at the same time
- I/O: I2C connection capable of connecting to as many as 32 OPTO 22 I/O modules

Available options:
- Remote scale card with connections for an analog base with Analog to digital conversion rate of 60 times per second and an external Quartzell interface
- Remote expanded control interface for 8, 16, 24, or 32 OPTO 22 I/O modules (SSCU-8)
- External battery: BP-25R 12-Volt battery with built-in charger. Up to 18 hours continuous operation
- Internal battery: Two 6-Volt batteries with internal charger. Up to 9 hours continuous operation
- 230 VAC inline transformer
- Ball top (N/A on 10-lb. scale)
- Alphanumeric, serial keyboard
- Draft shield for 10-lb. scale (recommended for display resolution above 10,000 divisions)

Operating temperature: 14°F to 104°F (-10°C to 40°C)

Dimensions:
Platform 12" x 14" (50- and 100-lb models)
Platform 8.5" dia. (10-lb. model)
Overall 14" W x 17" D x 4.5" H

Weight: 18.5-lbs. (Internal options increase weight)

Agencies:
UL/CUL
CE pending
NTEP Class III 10,000 divisions

WEIGH-TRONIX

Weighing Products & Systems