TOUCH SCREEN ANALYTICAL BALANCE

PTX SERIES

PTX-FA / PTX-JA

5-inch colour TFT touch screen · EMFC electromagnetic force sensor · Built-in density application



PTX-FA · 0.1 mg / 0.0001 g



PTX-JA · 1 mg / 0.001 g

10

CAPACITY GRADES

PTX-FA 7 + PTX-JA 3

0.1 mg / 1 mg

READABILITY

two accuracy levels

Internal / External

CALIBRATION

N & W versions (FA)

01 / OVERVIEW

One platform, two accuracy levels

The PTX Series is built around an IoT-enabled 5-inch colour TFT integrated touch screen. A high-performance single-chip microprocessor, a high-speed CPU and a dedicated ASIC chip work with a high-precision electromagnetic force (EMFC) sensor to deliver accurate, stable weighing results. The housing is precision-cast from environmentally friendly ABS and the interface switches between Chinese and English with a single tap. A high-efficiency die-cast aluminium alloy base keeps the load-bearing structure rigid and stable, the fully transparent glass windshield keeps the sample clearly visible, and both the deck plate and the weighing pan are made of stainless steel. Weighing modes include weighing, parts counting, percentage weighing, unit conversion, time setting and density determination.

> **PTX-FA** — 0.0001 g (0.1 mg) analytical balance with a glass windshield, available in Internal Cal. (N) and External Cal. (W) versions. **PTX-JA** — 0.001 g (1 mg) precision balance for larger capacities, on the same touch screen platform.

02 / FEATURE HIGHLIGHTS

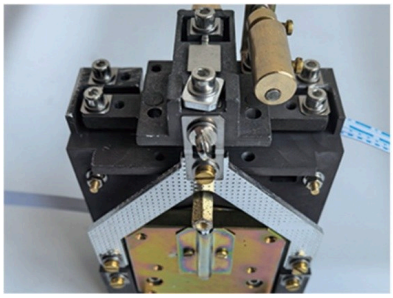
What makes the difference



Density Kit



5-inch Touch Screen



EMFC Sensor

Direct density measurement

A built-in density application performs all gold density calculations automatically. Fit the density kit and the same balance doubles as a density meter — no manual conversion, quick and easy to use.

Colour touch screen

A 5-inch colour TFT touch screen shows bright, legible digits under any lighting. Display and keys are integrated in one panel for intuitive, convenient operation, with one-tap switching between Chinese and English.

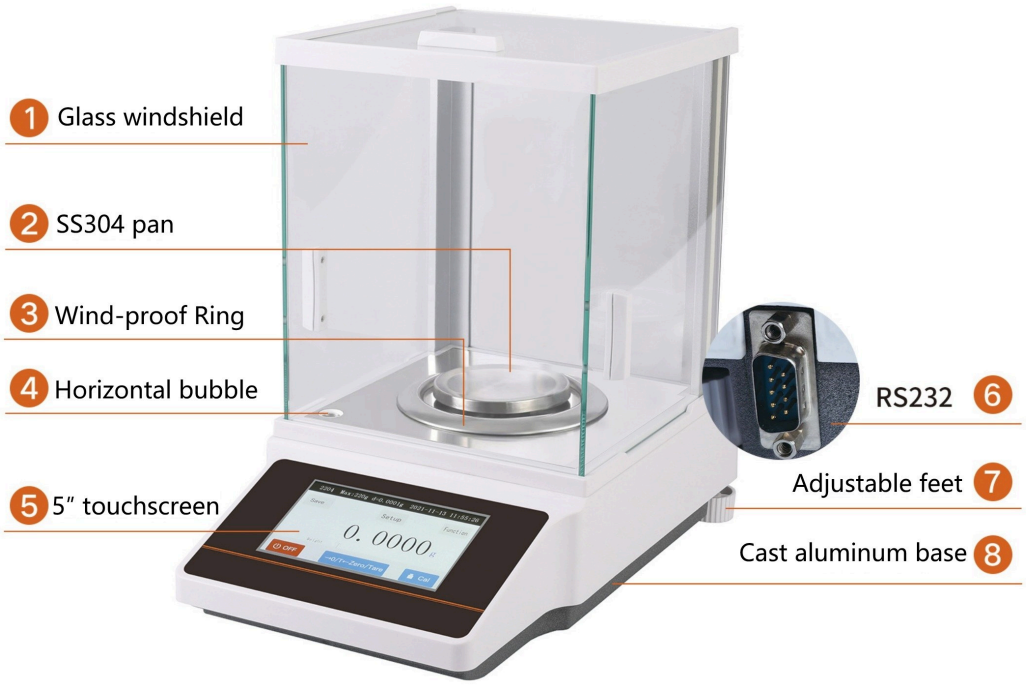
EMFC electromagnetic force sensor

A high-performance single-chip microprocessor, high-speed CPU and dedicated ASIC chip drive a high-precision electromagnetic force sensor, ensuring accurate results and long-term stability.

03 / HARDWARE

Instrument components

Numbered guide to the windshield, weighing pan, control screen, levelling feet and rear connections.



04 / STANDARD FUNCTIONS

Built-in capabilities

- ✓ 5-inch colour TFT touch screen with one-tap Chinese / English switching
- ✓ High-precision electromagnetic force (EMFC) sensor for accurate, stable results
- ✓ Fully transparent glass windshield, stainless steel deck plate and weighing pan
- ✓ Weighing, parts counting, percentage, unit conversion, time setting and powder weighing
- ✓ High-performance single-chip microprocessor, high-speed CPU and dedicated ASIC chip
- ✓ Precision-cast ABS housing on a high-efficiency die-cast aluminium alloy base
- ✓ Built-in density application; one instrument for weighing and density with the density kit
- ✓ RS232 standard, USB optional; 3 s stabilisation time

One instrument, two jobs — the built-in density application calculates gold and precious-metal density automatically; with the optional density kit fitted, the balance doubles as a density meter. RS232 is standard, USB is optional.

05 / MODEL SELECTION — PTX-FA

PTX-FA · 0.0001 g analytical balance

Two calibration versions are available at each capacity: Internal Cal. (N suffix, with a built-in calibration weight) and External Cal. (W suffix, calibrated with an external weight). The 500 g grade is available in the External Cal. version only.

Item	100 g	120 g	200 g	220 g	300 g	320 g	500 g
Internal Cal.	FA104N	FA124N	FA204N	FA224N	FA304N	FA324N	—
External Cal.	FA104W	FA124W	FA204W	FA224W	FA304W	FA324W	FA504W
Readability	0.0001 g						
Repeatability	± 0.0002 g						
Linearity	± 0.0002 g						
Stabilisation time	3 s						
Pan size	Ø 80 mm						
Interface	RS232 standard, USB optional						

Note: there is no Internal Cal. version at 500 g (FA504W is External Cal. only). Common specifications — units, weighing modes, power supply, dimensions and weights — are listed in the technical specifications table above.

N **Internal Cal.** — a built-in calibration weight; the balance calibrates itself at the touch of a key. Recommended for laboratories with frequent temperature changes or strict SOP requirements.

W **External Cal.** — calibrated with an external standard weight supplied with the instrument. A cost-effective choice for stable environments.

> Model codes: **FA**[capacity]**N / W** — e.g. FA204N (200 g, Internal Cal.), FA204W (200 g, External Cal.). The 500 g grade is **FA504W only**.

06 / MODEL SELECTION — PTX-JA

PTX-JA · 0.001 g precision balance

Three capacity grades at 0.001 g readability, sharing the same touch screen platform as the PTX-FA.

Item	JA503W	JA1003W	JA2003W
Capacity	500 g	1000 g	2000 g
Readability	0.001 g		
Repeatability	± 0.002 g		
Linearity	± 0.002 g		
Pan size	Ø 110 mm	Ø 110 mm	Ø 160 mm
Stabilisation time	3 s		
Interface	RS232 standard, USB optional		

Common specifications — units, weighing modes, power supply, dimensions and weights — are listed in the technical specifications table above.

Which accuracy level do you need?

PTX-FA · 0.0001 g

For analytical work: sample masses down to 0.1 mg, formulation, assay and density of small precious-metal samples. Capacities 100–500 g with a Ø 80 mm pan and glass windshield.

PTX-JA · 0.001 g

For larger samples and production checks: 500 / 1000 / 2000 g capacities with Ø 110–160 mm pans, 1 mg readability and the same 3 s stabilisation time.

Both series share the same 5-inch colour TFT touch screen, EMFC sensor, density application, RS232 interface, housing and power supply. The differences are readability, pan size and the Internal / External Cal. options available on PTX-FA.

07 / TECHNICAL DATA

Technical specifications

Parameter	PTX-FA · 0.1 mg	PTX-JA · 1 mg
Capacity	100 / 120 / 200 / 220 / 300 / 320 / 500 g	500 / 1000 / 2000 g
Calibration	Internal Cal. (N suffix) / External Cal. (W suffix)	External Cal. (W suffix)
Readability	0.0001 g (0.1 mg)	0.001 g (1 mg)
Repeatability	± 0.0002 g	± 0.002 g
Linearity	± 0.0002 g	± 0.002 g
Stabilisation time	3 s	3 s
Pan size	Ø 80 mm	Ø 110 mm (500 / 1000 g) · Ø 160 mm (2000 g)
Battery	None	None
Units	g, mg, ct, lb, gn, ozt, dwt, dr, mm, tmr, tar, tLt, tl, h	g, mg, ct, lb, gn, ozt, dwt, dr, mm, tmr, tar, tLt, tl, h
Weighing modes	Basic weighing, parts counting, percentage weighing, density determination, powder weighing	Basic weighing, parts counting, percentage weighing, density determination, powder weighing
Tare range	Full capacity	Full capacity
Power supply	Adapter input 100–240 V~ 200 mA, 50–60 Hz, 12–18 VA; output 5 VDC 2.5 A	Adapter input 100–240 V~ 200 mA, 50–60 Hz, 12–18 VA; output 5 VDC 2.5 A
Overall dimensions	360 × 210 × 320 mm	360 × 210 × 320 mm
Interface	RS232 standard, USB optional	RS232 standard, USB optional
Net weight	5 kg	5 kg
Shipping weight	7.3 kg	7.3 kg
Shipping dimensions	50 × 36 × 47 cm	50 × 36 × 47 cm

Specifications are for standard configurations. Capacity, pan size, interface and documentation can be adjusted for OEM / ODM projects; contact us with your requirement.

08 / OPTIONS

Optional accessories



Remote Display


Micro Printer


Density Kit


Calibration Weight

A standard calibration weight with a protective case is supplied with the instrument for convenient daily calibration.

Density kit

For direct density measurement of gold, precious metals and solids. Fitted in seconds; the balance performs the calculation automatically.

Data & printing

RS232 is standard for printers and PCs; USB is optional. A micro printer and RS232-USB cable are available for record keeping.

09 / APPLICATIONS

Typical applications

Gold & precious metal density	**Precision laboratory weighing**	**Parts counting**	**Percentage formulation**
Powder weighing	**Quality control & R&D**	**Jewellery assay**	**Teaching laboratories**

10 / SUPPLY

OEM / ODM & service

Factory-direct

Standard models ship from our own factory with calibration and inspection before dispatch. Export packing and documentation are included.

Custom configuration

Capacity, calibration version, voltage, branding, language and documentation can be specified for your market.

11 / QUALITY

Built for stable daily weighing

- ✓ Precision-cast ABS housing on a die-cast aluminium alloy base
- ✓ High-performance single-chip microprocessor, high-speed CPU and ASIC
- ✓ Fully transparent glass windshield with a stainless steel deck plate
- ✓ 3 s stabilisation time with RS232 data output

CONTACT

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Mon – Sat 09:00 – 18:00 (GMT+8) · Reply within one working day

Scan to chat on WhatsApp

Request a quotation — send us the model code (e.g. FA204W or JA1003W), your sample type and destination country. A technical sales engineer will reply with a configuration and price within one working day.