ORTEC

WPC-1150-GFW-3/GFW-5

Automatic alpha/beta counter with a large detector for air filters

Automatic low-background counters with a 3.5 in or 5 in gas-flow proportional detector, aimed at health physics and environmental applications. They suit large-diameter air filters from high-volume air samplers and have a colour touch screen, cosmic guard detector and 10 cm of lead.



Detector type

Pancake-style gas-flow proportional detector, Ø8.9 cm (GFW-3) or Ø12.7 cm (GFW-5) [1]

Weight

816 kg [1]

Specifications

DETECTOR

Detector type	Pancake-style gas-flow proportional detector, Ø8.9 cm (GFW-3) or Ø12.7 cm (GFW-5)	[1]
Window	Aluminised, 80 µg/cm²	[1]
Guard detector	1 large gas-flow proportional detector	[1]
Sample geometry	Custom planchet sizes; planchets up to 5/16 in deep; active detector area 3.5 in (8.9 cm) or 5 in (12.7 cm)	[1]

PERFORMANCE

Typical detection efficiency	^{230}Th 27%, ^{90}Sr/^{90}Y 63%, ^{99}Tc 41%, ^{63}Ni 20%	[1]
Background rate	Typical, 3.5 in: alpha 0.3 cpm, beta 1.5 cpm; 5 in: alpha 0.4 cpm (0.5 warranted), beta 4 cpm (5 warranted)	[1]

COOLING

Sample capacity	Automatic 50-sample changer with barcode reader, sample range 1–999	[1]

SOFTWARE & DATA

Software	Vista FC (health physics) and Vista 2000 (radiochemistry) as options	[1]

CONNECTIVITY & INTERFACE

Communication	Data export via USB flash drive and RS-485	[1]
User interface	Built-in colour touch screen	[1]

POWER & BATTERY

Power supply	117 V AC, <0.2 A, 50/60 Hz or 230 V AC, <1.0 A, 50/60 Hz	[1]

MECHANICAL

Dimensions	62.5 × 91.4 cm (W × D)	[1]

Weight	816 kg	[1]

ENVIRONMENT & RATINGS

Operating temperature	10–40 °C	[1]
Humidity	20–90%, non-condensing	[1]

GENERAL

Counting gas	P-10, 60 cc/min at 10 psi; Gas-PRO fail-safe monitoring senses breaches in gas flow	[1]
Lead shielding	10 cm (4 in) lead	[1]
Count modes	Alpha only; beta only; alpha/beta simultaneously	[1]
Cross talk	Alpha to beta <0.1%; beta to alpha <0.1%	[1]
Use	Health physics and environmental work; large-diameter air filters from high-volume air samplers	[1]

Sources

[1] **ORT-WPC-1150-GFW-3/ORT-WPC-1150-GFW-5 Automatic Sample Changer**
ORTEC (AMETEK) · product-page · Ordering Information; Specifications; Instrument Specifications · checked 2026-10-16
https://web.archive.org/web/20261016000000/https://www.ortec-online.com/products/systems/gross-alpha-beta-me...

Every value is taken from the manufacturer's own document; the number after the value refers to the source list. Always check against the latest datasheet before ordering.

The data comes from the manufacturer's published documents. Manufacturers may change specifications; the current configuration and performance are confirmed in the quotation.