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Data Sheet

August 15, 2026

AMETEK / EG&G / PRINCETON APPLIED RESEARCH

Ametek / EG&G / Princeton Applied Research 162 Boxcar Averager

EG andGPrinceton Applied Research 162 Boxcar Averager Mainframe The EG andGPrinceton Applied Research Model 162 is a modular boxcar averager mainframe for gated signal recovery. OEM PAR 162 literature describes a timing and control chassis that accepts Model 163 or 164 processor modules, or Model 165 gated integrator modules, to sample an input with a fixed or scanning aperture. Pulsed laser detector averaging, analytical gated signal recovery, and laboratory extraction of repetitive waveforms from noise. The EG andGPrinceton Applied Research Model 162 is a modular boxcar averager mainframe for gated signal recovery. OEM PAR 162 literature describes a timing and control chassis that accepts Model 163 or 164 processor modules, or Model 165 gated integrator modules, to sample an input with a fixed or scanning aperture. Pulsed laser detector averaging, analytical gated signal recovery, and laboratory extraction of repetitive waveforms from noise. Modular mainframe for 163/164/165 plug-in processors Automatic scan and digital storage options



MODEL

**Ametek /
EG&G /
Princeton Applied
Research 162**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

162

LISTING

[https://aumictechlabs.c
om/products/162-3/](https://aumictechlabs.com/products/162-3/)

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Ametek / EG&G / Princeton Applied Research 162 Boxcar Averager is a signal recovery mainframe designed to extract repetitive signals from noisy backgrounds through synchronous sampling and averaging. The instrument measures signal amplitude at specific time intervals with precise timing control, delivering improved signal-to-noise ratio for analytical applications across physics, chemistry, and engineering. When paired with processor modules such as the Model 163 Sampled Integrator or Model 164 Gated Integrator, it forms a complete gated signal-recovery system capable of fixed or scanned aperture analysis.

Technical Specifications

Manufacturer: Ametek / EG&G / Princeton Applied Research
Model: 162 Boxcar Averager (Mainframe)
Aperture Delay Range: 5% to 100% of delay range, 1-2-5 sequence, 0.1 μ s to 50 ms
External Trigger Level: ± 15 V adjustable
External Trigger Input Impedance: 50 k Ω
External Trigger Maximum Input: ± 100 V
Output Low-Pass Filter Time Constant: 100 μ s to 100 s adjustable

Key Features

- Synchronous sampling with front-panel aperture delay control
- Multiple trigger modes: external (positive or negative edge), line trigger, internal trigger
- Gated signal averaging with controlled sampling integration
- Variable time constant integrator in mainframe signal processing
- Rear-panel scan functions for internal or external scanned analysis
- Dual-channel output with difference selection capability
- Optional processing functions: Product (162/95), Log Ratio (162/96), Ratio (162/97)
- Digital Storage Option (162/99) for extremely low repetition rate signal averaging

Typical Applications

Repetitive signal extraction from noise-dominated measurements in spectroscopy, transient analysis, weak-signal detection, and time-resolved analytical techniques requiring improved signal fidelity.

Compatibility & Integration

The Model 162 mainframe integrates with Model 163 Sampled Integrator (aperture resolution from 100 ps to 1 ns with selected sampling head) and Model 164 Gated Integrator processor modules to configure complete boxcar averaging systems tailored to specific temporal resolution and signal processing requirements.

162 Characteristics / Specifications

PARAMETER	VALUE
Model	162
Instrument Type	Boxcar averager mainframe
Manufacturer	EG andGPrinceton Applied Research
Successor Line	AMETEK Signal Recovery
Compatible Processor	Model 163 sampling integrator
Compatible Gated Integrator	Model 164 or 165
Sampling Head Option	163/98 S2 75 ps
Preamplifier Companion	Model 115
Ac Input Low Range	105 to 125 Vac
Ac Input High Range	210 to 250 Vac
Line Frequency	50 to 60 Hz
Power Consumption Maximum	85 VA
Overall Length	18.250 in
Overall Width	17.125 in
Overall Height	7.000 in
Nsn Mainframe	6625-01-161-1060
Nsn System Example	6625-01-157-9174
Arithmetic Option	162/97 A/B
Digital Readout Option	162/98
Digital Storage Option	162/99
Form Factor	benchtop modular mainframe
System Role	timing and control plus output processing
Operating Mode	gated synchronous sampling
Aperture Mode	fixed point or slow scan across the waveform
Input Power Listed Configurations	115/230 Vac

PARAMETER	VALUE
Mass Class	approximately 30 lb shipping class on reseller listings

162 Specifications

PARAMETER	VALUE
Key Features	Modular mainframe for 163/164/165 plug-in processors
Automatic scan and digital storage options	Arithmetic option 162/97
Technical Specifications	Model: 162

Full OEM specifications

Complete technical content extracted from the manufacturer datasheet. Sparse OEM tables are reconstructed as tables below; other text is preserved as paragraphs.

Specifications	
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Notes

Plug-in aperture widths and sampling-head limits belong on the installed 163/164/165 module datasheet and calibration certificate. Do not invent gate widths for the empty mainframe.

Available from Aumictech

Used and refurbished unit evaluated in-house. Calibration: Available on request. Used · In stock.

Request a quote: sales@aumictech.com · +1 (484) 841-9341

Aumictech

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Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.