

facts on Infrared

DOUBLE PASS OPTICS

The double pass feature of the new Perkin-Elmer Model 112 Infrared Spectrometer doubles dispersion, increases energy per spectral slit width, and eliminates false radiation. Double pass optics retain the simplicity of a single monochromator system and provide the performance of a double monochromator, at low cost.

The high resolution obtainable makes the instrument well suited for advanced research problems, while the freedom from scattered radiation permits highest accuracy for routine quantitative applications. "Building Block" construction simplifies the addition of special accessories such as microscopes, reflectance attachments, etc.

The Model 112 retains all features of the well-known Perkin-Elmer Model 12-C Infrared Spectrometer. All accessories for the 12-C are usable with the 112. Existing Model 12-C's may be converted to double pass operation. Complete description and details available in Bulletin 102.

INFRARED INSTRUMENTS FOR ALL APPLICATIONS

For the Research and Control Laboratory

Model 112—Single beam, double pass. Unitized construction for extreme flexibility. Best for (1) research problems requiring highest resolution or (2) routine single point, quantitative analysis.

Model 21—Double beam; compactly designed expressly for the fastest, most efficient recording of infrared spectra.

Model 13—Single or double beam. Unitized construction. For the laboratory requiring both maximum versatility and convenience of operation.

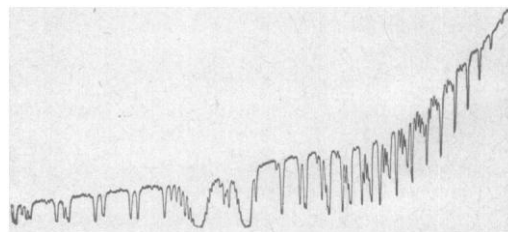
For Continuous Analysis in the Process Plant

The Model 93 Bichromator Analyser®—a dispersion instrument—and **The Model 105 Tri-Non® Analyser**—a non-dispersion instrument. Both featuring long-time stability, high sensitivity and unitized construction. Will operate on gas and liquid streams. Descriptive literature on each instrument available on request.

The Perkin-Elmer Corporation, 840 Main Ave., Norwalk, Conn.



Mobile Model 112—An Analytical Laboratory on Wheels.



10 μ ammonia band shows high resolution of Model 112.

FEATURES OF THE MODEL 112

- 1—Resolution better than 2.0 cm^{-1} with suitable prisms.
- 2—Scattered radiation less than 0.1 percent throughout the range.
- 3—Range: 1-40 microns (with suitable prisms). May be used in the visible and ultraviolet with special available attachments.
- 4—Effective $f/4.5$ monochromator.
- 5—Open, accessible space for direct introduction of all sampling accessories.
- 6—Double thermostating for stable accurate performance.
- 7—Self-contained mobile cabinet.
- 8—Sampling down to 25 micrograms.

For optical design and electro-optical instruments

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