

Detectors

Single Wavelength

PM100

PM140



PM100 Detector



PM140 Detector

Features and Benefits

- Cost-effective and compact through the use of interference filters
- Enables measurement in low light applications through high-gain photomultiplier tube
- Adjusts for varying light conditions through automatic gain control feature when used with Verity's system controllers
- Simple installation through a KF40 flange or mounting bracket

Description

The PM100/140 Series detectors are used to measure a single fixed wavelength in the range of 185–830nm. When used with Verity's system controllers, the PM100/140 Series provides robust endpoint detection when used in the appropriate applications. This series is most commonly used in applications where the chemistry is simple enough that a fixed 10nm bandpass detector is suitable. At some wavelengths, alternative filters with a lower bandpass may be available.

The PM100 mounts to a viewport and includes an integral light aperture located on the bottom of the instrument. The PM140 includes a KF40 flange for mounting to the vacuum chamber. A quartz or sapphire window provides vacuum isolation. A sapphire window provides better resistance to window etching than the quartz window.

PM100/140 Pin-Out Assignments

DB9M D-Subminiature Connector	
Pin	Description
1	¹ Remote high voltage programming, 2–10VDC
2	Power input line, –12 to –15VDC (1mA), polarity protected
3	Power input line, +12 to +15VDC (7mA), polarity protected
4	Not used
5	Signal output, 0–10VDC
6	Not used
7	Circuit Ground Return
8	Not used
9	Circuit Ground Return

¹This enables automatic gain control when used with any of Verity's system controllers.