The detector has the following capabilities:

- Stand-alone programmability – Stores as many as five user-defined programs (or methods) consisting of as many as 50 programmable, timed events and two threshold events each.

- Single or dual-wavelength – Monitors absorbance at one or two discrete wavelengths.

- Wavelength verification reference filter – Ensures wavelength accuracy.

- Automatic, second-order filter – Automatically engaged for wavelengths of 370 nm and greater and removed for wavelengths 369 nm or less.

- Spectrum scan and storage – Supports spectrum scan, display, subtraction, storage, and playback, in addition to standard absorbance and UV/Vis functionality.

- Cuvette qualification – Facilitates qualification of the detector by insertion of a standard in a cuvette without breaking any plumbing connections. Waters qualification kits, available in cuvette form, support this feature, which allows the detector to serve as a benchtop spectrophotometer.

- Cuvette sample analysis – Allows recording of the spectrum of any sample placed in the cuvette.

- Method editing and storage – Supports basic method programming, storage, and retrieval from the front panel.

- Full diagnostic capability – Supports built-in diagnostic tools to optimize functionality and performance.

- Two contact closure outputs – The detector has two configurable switches, each of which can accommodate a maximum of ±30 VDC, 1.2-A current carrying capacity, and 0.5-A current switching. The switches (SW1 and SW2) can trigger fraction collectors and other external devices, as well as activate according to time, absorbance threshold, or ratio criteria.

- Therma- wander management – To mitigate thermal instability caused by ambient temperature changes, the detector's insulation ensure air flow across the optics bench, and a variable speed fan that runs at higher or lower speeds, as needed.

- Median Baseline Filter (MBF) – A variation of the data mode, the MBF decreases the effects of gradient separations on the chromatographic baseline. It enhances the UV detector's baseline stability by decreasing its curvature, making the development of integration methods easier.