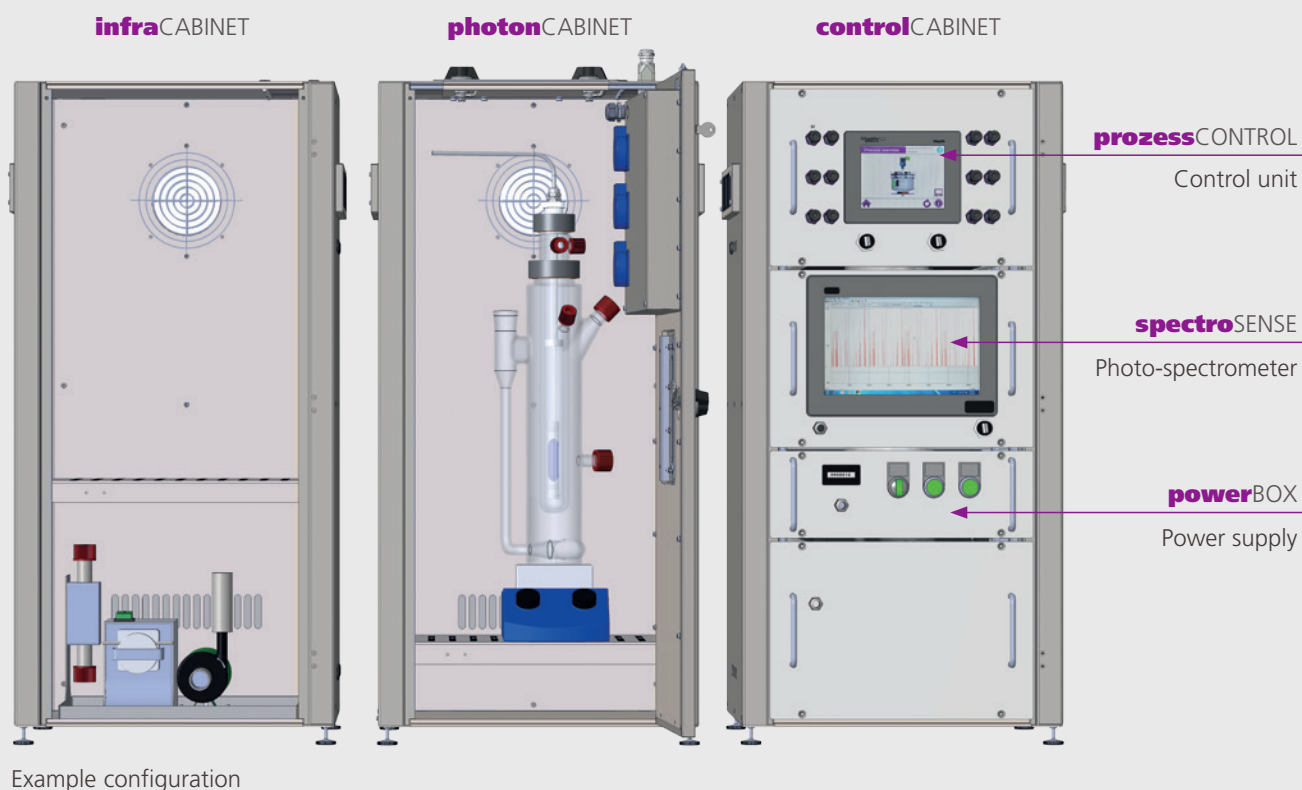




MPDS



Example configuration

MPDSEVO Batch-M Photoreactor 250-400 ml

The selection of a suitable photoreactor is fundamentally dependent on the requirements of chemical reactions and physical properties of reactants. Using a photoreactor with a low optical path length is necessary, especially for liquids with a molar extinction coefficient of more than 30 m^{-1} . This photoreactor is developed for this purpose. When operating at low process volumes and optical path lengths lower than 2 cm, it is necessary to ensure thorough mixing of the medium. A conventional magnetic stir bar is unsuitable for use in this case because the vortex generated in the annular gap does not allow for the exchange of substances between different levels.

This photoreactor is therefore equipped with an integrated magnetic drive circulation pump, which provides thorough mixing of reactants when used together with a lateral riser pipe. The magnetic drive circulation pump is made of durable and chemically inert materials and can be easily removed from the photoreactor for cleaning.

Like all other photoreactors of the **MPDS** Toolbox, this photoreactor is equipped with a sensor port. Length of reaction times can be freely determined, so that a high yield, close to that at equilibrium, is guaranteed.

The photoreactor's high efficiency and simple handling make it a universal standard for use in research and development.

