



Redeem Photo-Flow Reactor

Enlighten Continuous Processing

Product Datasheet



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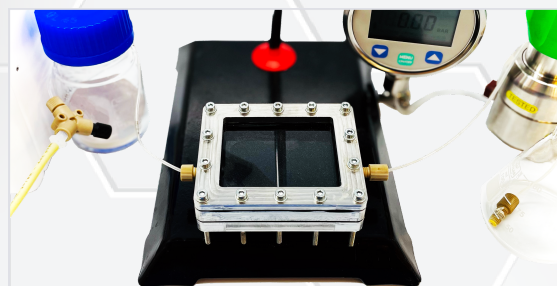
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Product Description

The Redeem's Photo-Flow Reactor enlightens continuous processing by providing a highly customizable photo-catalytic flow reactor that combines the benefits of photo and flow chemistry for efficient, green and more convenient chemical research.



Technical Data

Illuminated area	16 × 5 cm	
Illuminated depth ¹	700 μm	¹ Tune the illuminated depth in the range of 350 μm to 2000 μm with Redeem adjustable gaskets
Dimensions LxWxH	8.5 × 7 × 4 cm	
Reaction volume ²	2.1 ccm	² Smaller reaction volumes are available with the Redeem - μchannel gasket
Weight	0.66 kg	
IMoC ³	Stainless steel	³ Other materials are available including aluminum and Hastelloy
Seals ⁴	FKM Viton	⁴ PTFE and Silicon seals are available
Allowable temperature range	-20°C and +205°C	
Maximum allowable pressure	5 bar	
Window ⁵	Float glass (λ =365 to 700 nm)	⁵ Quartz windows are available for shorter wavelength
Membrane ⁶	Add-on	⁶ Select membranes from the Redeem membrane library
Particle strainer ⁷	Add-on	⁷ Used for fixing catalyst particles, available in the range of 25 to 200 μm opening strainers
Inlet/outlet ⁸	I dex ¼ - 28 female UNF	⁸ Other connections are available

Membrane Library

Polytetrafluoroethylene (PTFE)

Polyamide

Amorphous Fluoroplastic (AF 2400)

Polypropylene (PP)

Polyimide

Thermoplastic Polyurethane (TPU)

Polyether Sulfone (PES)

Suggested Additional Equipment

Pumps	Syringe pumps, Masterflex or Golaner peristaltic pump (2.5 bar), Knauer HPLC pump for P> 2.5 bar
Light Source	Kessil or Hepatochem (1 LED is enough to illuminate one reactor)
Tubing	FEP 1/16 and 1/8 in tubing, Pharmed BPT tubing for peristaltic pump



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About Redeem Solar Technologies



Contribute to a sustainable future by providing the world with green energy, chemicals, and active pharmaceutical ingredients through innovative technologies that leverage the power of light.

Supported by:

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