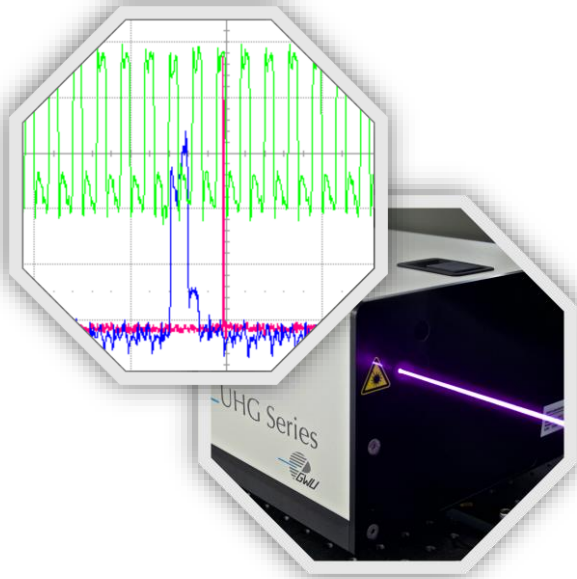


UHG-PSK

Ultrafast Pulse Selector for the UHG-Series



UHG-PSK Specification

UHG-Series Pulse Selector	
Bragg Cell	SiO ₂ for high power capability up to 5 W avg. input power
Picking Ratio	$v_{rep}/2 \dots v_{rep}/1023$ software controlled or arbitrary by external triggering (v_{rep} : Input repetition rate)
Picking Efficiency & Contrast Ratio flexible user adjustment by software all numbers specified at 800 nm, 80 MHz input, 8 MHz output ($v_{rep}/10$)	Diffraction Efficiency > 35% Contrast Ratio > 300:1 main to adjacent pulses > 400:1 main to nonadjacent pulses
External Control	Analog-in for amplitude modulation TTL for Start/Stop
Other	Controller and electronics integrated in optical head Completely software controlled

Features and Benefits

High pulse picking efficiency and contrast ratio

Flexible Contrast / Efficiency adjustment

Repetition rate adjustment from single shot up to 40 MHz

Multi-pulses and burst mode

Convenient software control

Capable for femto- & picosecond pulses and high power

Modular design integrated in UHG-Series

Applications

- Quantum-optics
- Non-linear spectroscopy
- Biophotonics
- Microelectronics

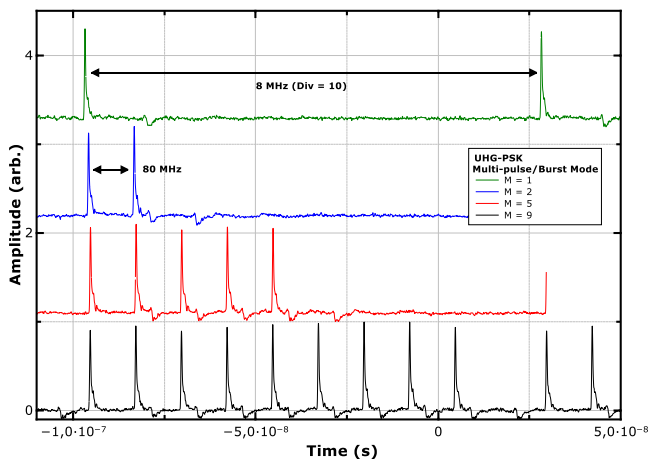
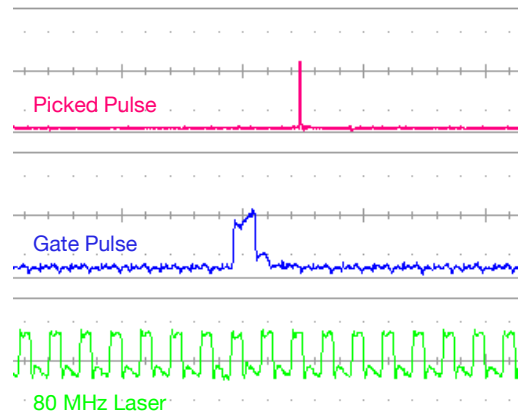
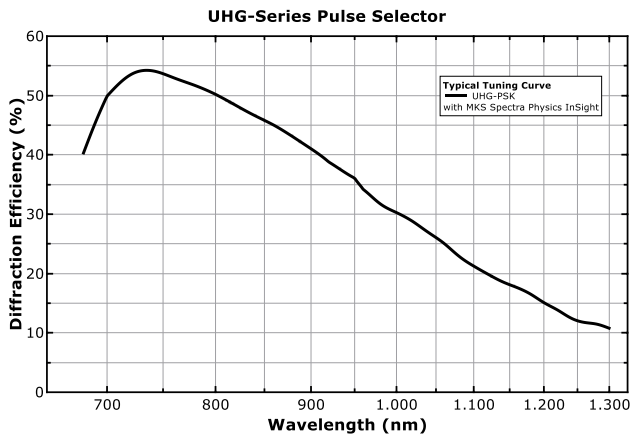
Notes

All specifications depend in the pump laser specifications and performance. Please contact the factory or our sales representatives for details. All specifications are subject to change without notice.



UHG-PSK Performance

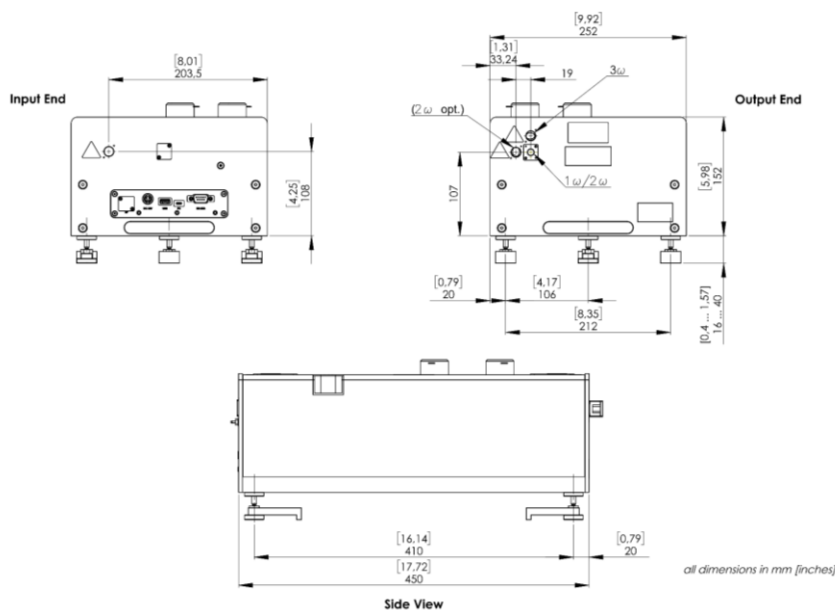
Typical performance with Spectra Physics Lasers, not a guaranteed or warranted specification



Pump Laser Requirements

Wavelength	680 – 1080 nm
Repetition Rate ν_{rep}	0.1 – 85 MHz
Polarization	Linear, horizontal built-in polarization rotator optionally available
Max. avg. Power	5 W
Sync. Signal	TTL/50 Ohms, > 100 mV, duty cycle in [10%-90%]

UHG-Series Dimensions and Properties



Mechanical + Utilities

Size UHG body
(L x W x H):
450 x 252 x 152 mm³

Weight UHG body:
13 – 16 kg
(depending on configuration)

Power requirements
Electronics & Motorizers:
100 – 240 V, 50 – 60 Hz

For dimensions with feet
please refer to the
dimensional drawing

