

## HELIOS-40W-DATASHEET

Parameter	HELIOS-40W-HP
Maximum output power	40W
Maximum single pulse energy	400μJ
Pulse duration	<250fs (190fs optional)
Pulse width adjustment range	250fs - 10ps (190fs - 10ps optional)
Repetition frequency range	10kHz - 100kHz (10kHz - 1MHz) optional
Pulse selection	Single shot - 100kHz (Single shot - 1MHz) optional
Central wavelength	1036 ± 5nm
Polarization	Vertical
Beam quality	M <sup>2</sup> <1.2
Beam diameter	5 ± 1mm
Pulse pointing stability	< 20 μrad/°C
Pre-pulse contrast	<1:1000
Post-pulse contrast	<1:500
Pulse energy stability	<1% RMS @8h
Long-term power stability	<0.5% RMS @24h
Dimensions	885 × 455 × 221mm (L×W×H)
Weight	77kg
	<b>Expansion Options</b>
Harmonic output	Integrable, 516nm, 345nm, 259nm
Optical parametric amplification output	Integrable, 210 - 16000nm
MPC short pulse output	Integrable, output pulse width <35fs, energy transmission efficiency >90%
Operating Modes	PSO, POD, Gate, Burst, etc.
Remaining weight	24kg (Water-cooled machine) +2kg (frequency doubling)
Power supply requirements	Laser head: AC 220V/10A ; Water-cooled machine: 220V/0.6-7.7A/1.26kW (CWUP-20A)