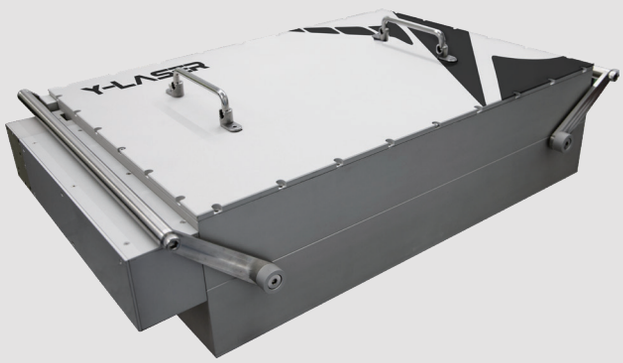
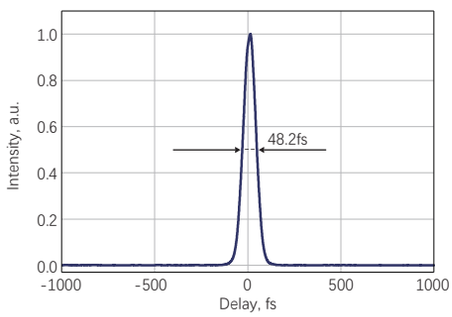
# AURORA-3P

## Three-Photon Imaging Source

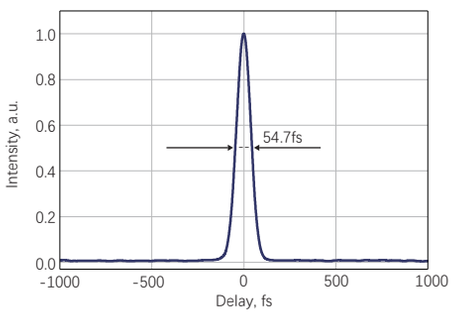


- Tuning range: 1250 - 1800nm
- Efficiency optimized at 1300nm and 1700nm
- Repetition rate up to 1MHz
- Output pulse width as low as 50fs
- Integrated automatic control of Group Delay Dispersion (GDD)
- Mechatronic design

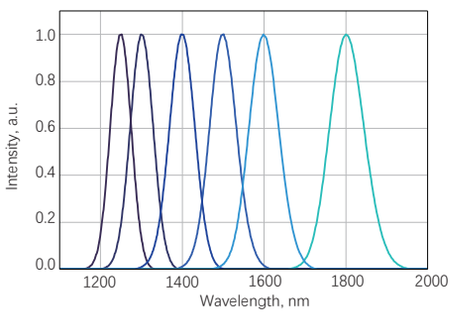
AURORA-3P Output Pulse Width@1300nm



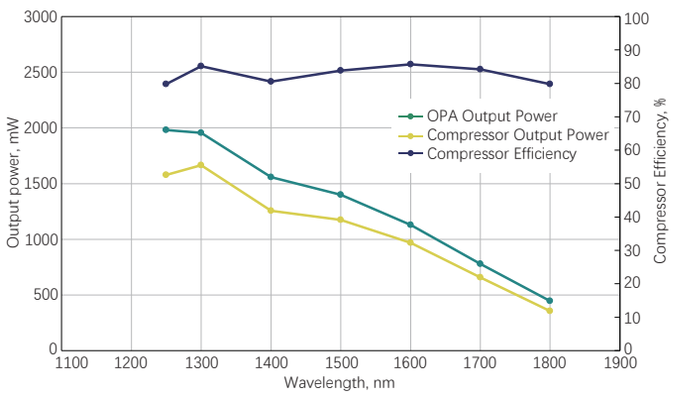

AURORA-3P Output Pulse Width@1700nm



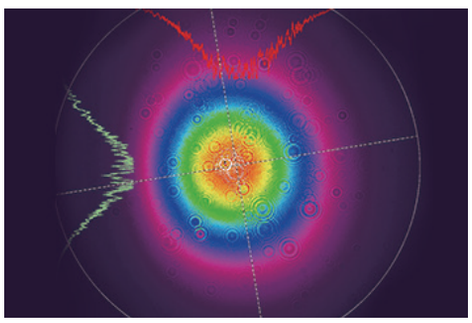

AURORA-3P Tuning Spectrum



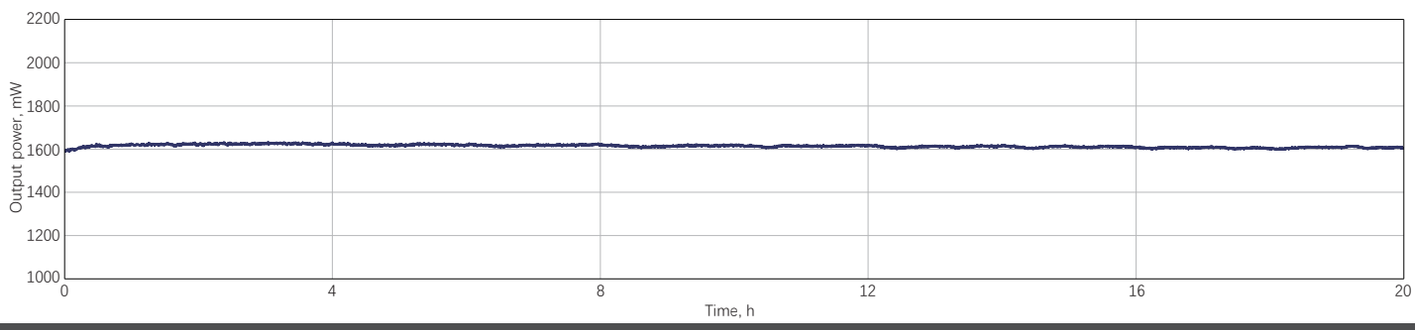

Output Power Comparison of 3P System with Compressor




AURORA-3P Typical Output Beam Profile



AURORA-3P
Power Stability: RMS=0.4389%@16h-1MHz/1.614μJ@HELIOS-40W-HP



## Specifications

| Parameter | AURORA-3P | |
|---|---|---|
| Tuning range | 1250 - 1800nm | |
| Typical output wavelength (switchable output) | 1300nm | 1700nm |
| Pulse duration[1)] | < 55fs | < 65fs |
| Repetition rate[2)] | Single pulse - 1MHz | |
| GDD control range[3)] | −4000 ~ +9000fs² | −12000 ~ +3000fs² |
| Output power[4)] | > 1100mW @ 1MHz | > 600mW @ 1MHz |
| Beam quality M² | M² < 1.2 | |
| Beam diameter[5)] | 2 - 4mm | |
| Beam divergence angle | < 1mrad | |
| Beam ellipticity | > 0.8 | |
| Pulse power stability[6)] | <1% RMS @ 24h | |
| Pulse energy stability[6)] | <1% RMS @ 1min | |
| Dimensions | 790 × 545 × 240mm (L×W×H) | |
| Weight | 85kg | |

## Expansion Options

| | |
|---|---|
| Optional extended output | 700 - 900nm |
| Remaining weight | 24kg (Water-cooled machine) |
| Power supply requirements | 500W |
| Power supply requirements for the water-cooled machine | Water cooler 1, 1260W; Water cooler 2, 1020W |

1) FWHM。
2) Lower repetition rates and higher pulse energies available upon request.
3) Continuous dispersion control; compensation from –3000fs² to +3000fs² for microscopy.
4) Pump laser: 40W / 1036nm. Higher power options available upon request. Please consult us for details.
5) Measured at the compressor output, 1/e² definition.
6) Expressed as NRMSD (Normalized Root Mean Square Deviation).

## Drawings