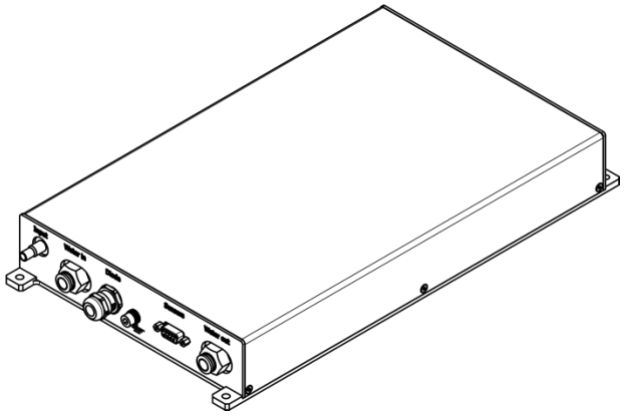
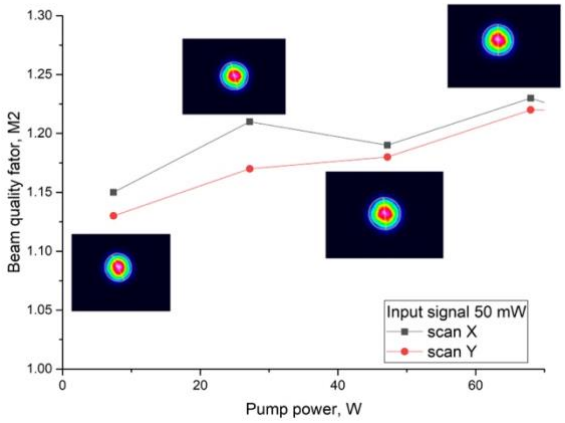
HIGH POWER FIBER AMPLIFIER MODULE

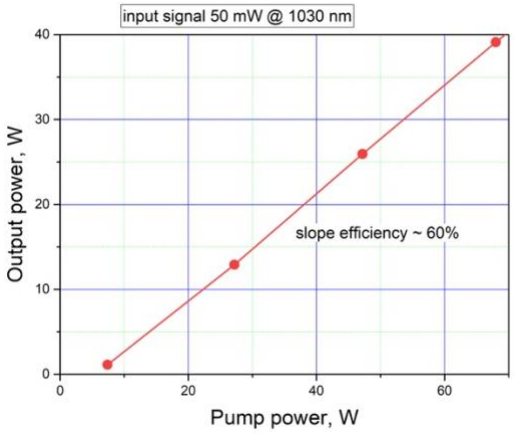
The YDFA-1030-40W is a user-friendly integrated module that comprises a large-mode-area tapered Yb-doped fiber with a unit for coupling pump in and amplified signal out. This module has been optimized to amplify 1030-1070 nm signals with very high gain (more than 30 dB). It allows achievement of ultimately high peak power (> 300 kW for ps pulses) and high average power (> 40 W). The output for the amplified signal is collimated free space beam and there is a single-mode fiber port for splicing the input signal. The pump diode is integrated into the module (optionally fiber port 105/125mm, NA 0.22 for pump injection can be made). The module requires water cooling (option with air cooling is available).



Measurements of beam quality factor M^2



Pump-to-signal conversion efficiency



General Feature

ITEM #	Signal input port	Pump @ 976±1 nm	Pump to signal conversion efficiency (slope), %	Dimension W x L x H, mm
YDFA-1030-40W	PM 10/125-DCF fiber	Integrated or fiber port for input (MM-105/125-0.22NA)	~ 60	380 x 280 x 50

Module Fiber Specifications

ITEM #	Input signal, mW	Polarization extinction ratio, dB	Output beam quality M^2	Weight, kg
YDFA-1030-40W	> 50	> 10	< 1.3	< 7

Other parameters (i.e. output power in excess of 50 W and module with air-cooling) are available on the request