AdValue Photonics
Innovative & Reliable

# Amplifier Module at 1 Micron Wavelength

## AP-AMP-MOD-1000

### Features:

- $M^2$ <1.2
- >23 dB gain
- >1 MW peak power
- >120 W average power
- Compact size
- Conductive Cooling (Not water cooling)
- Patented protected US Patent 9,640,936 & 9,581,760


### Applications:

- ns, ps, fs short pulse amplification
- Single frequency pulse amplification

### Optical Characteristics:

| Parameter | Specification |
|---|---|
| Operating wavelength | 1030 nm, 1064 nm or other wavelengths |
| Output power | 100 W, 120 W; or higher average power |
| Output pulse energy | 350 µJ at 5 ns, 100 µJ at 0.4 ns, 15 µJ at 15 ps; or higher peak power |
| Input power | 0.5% output power, 23 dB gain |
| Optical efficiency | >50% |
| Beam quality | $M^2$ <1.2 |
| PER | 15 dB |
| Operation mode | Pulsed or CW |
| Input signal fiber | Options: PM 8.5/125 NA 0.085 OR PM 14/125, NA0.07 |
| Input pump fiber | MM 105/125, NA 0.22 |
| Output | Free-space output |
| Cooling | Conductive Cooling (Not water cooling) |

(For special requirement, please contact AdValue Photonics for options.)

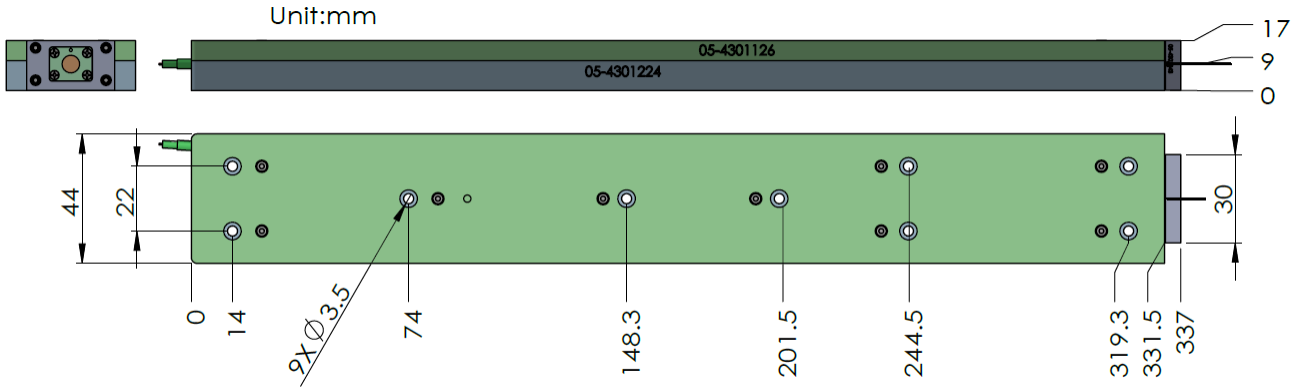
*Specifications subject to change without notice*

## General Characteristics:

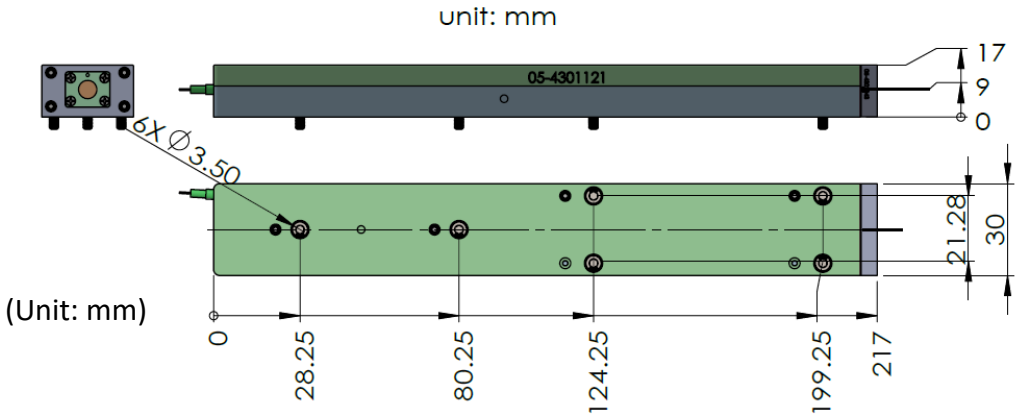
| Parameter | Specification |
|---|---|
| Operating temperature | 20 to 35 °C |
| Storage temperature | -10 to +70 °C |
| Cooling | To be mounted on 25 °C water-cooled plate |
| Packaging (gain fiber module) | Semi-hermetic, dust sealed, dimensions 337(L) x 44(W) x 17(H) mm OR 217(L) x 30(W) x 17(H) mm |

## Mechanical Outline:

Version G2L




Version G2




## Model/Part No. Information:

| Part Number: | AP-AMP-MOD | - | xxxx | - | xxx | - | S | - | G2L |
|---|---|---|---|---|---|---|---|---|---|
| | Model:<br>AP-AMP-MOD-1000<br>(Amplifier Module at 1 µm) | | Standard Wavelength:<br>1030 = 1030 nm<br>Custom Wavelength:<br>xxxx = xxxx nm | | Output Power:<br>100 = 100 W<br>10 = 10 W<br>xx = xx W | | S = Standard<br>(5 ns pulses at 300 kHz, 23 dB gain at 1030 nm)<br>Other: Specify with AdValue Photonics | | Package:<br>G2L = Standard<br>G2 = Available as appropriate |

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