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GAIN MODULE AMPX - TGMC

APPLICATIONS

SCIENCE

INDUSTRY

AEROSPACE



KEY FEATURES

- High-power gain module based on patented tapered double clad fiber (T-DCF)
- Single mode output, $M^2 < 1.3$
- Large mode area, low level of nonlinear effects
- Rigid metal housing
- Ready to splice to pump and seed source
- Easy thermal management
- Thermistors for temperature monitoring

SPECIFICATIONS

PARAMETER	MIN	TYP	MAX	UNITS
OUTPUT				
Output power ¹⁾		100		W
Mode field diameter		26-35		µm
M ²	1.0	1.2	1.3	
INPUT				
Wavelength	1030	1040	1065	nm
Input signal power	5	100	-	mW
Pump power ³⁾			200	W
Pump wavelength		976		nm
FIBERS				
Input signal fiber	PM980XP, others upon request			
Pump fiber	105/125 NA 0.22, others upon request			
MECHANICAL				
Dimensions	342 mm x 330 mm x 38 mm			
Water flow	5		10	l/min

¹⁾ Output power depends on the applied pump power and seed input. The pump assembly is capable of handling up to 200 W of pump power and 140 W of output power.

DESCRIPTION

GAIN MODULE AMPX-TGMC is an amplifying module containing all the needed optical components packaged inside an aluminum housing. The module includes Ampliconyx patent protected, polarization maintaining ytterbium doped tapered double clad fiber (T-DCF) (US 8,433,168 B2, Japan 5390524, People's Republic of China ZL 200880119087.7, EPO 08805462.2 pending). The unit is ready-to-splice to pump diodes and seed source. The module has a standard single-mode fiber (PM-980) input and free-space output with excellent single-mode beam quality ($M^2 < 1.3$) and power up to 140 W. Built-in thermistors can be used to monitor the operating temperatures of the the gain fiber.

This module is ideal for customers who want to have fully assembled, ready-to-splice gain unit, but prefer to use their own pump diodes or integrate the module inside a larger system. The module is fully tested and shipped with a complete test report.

ORDERING INFORMATION

AMPX-TGMC - - -

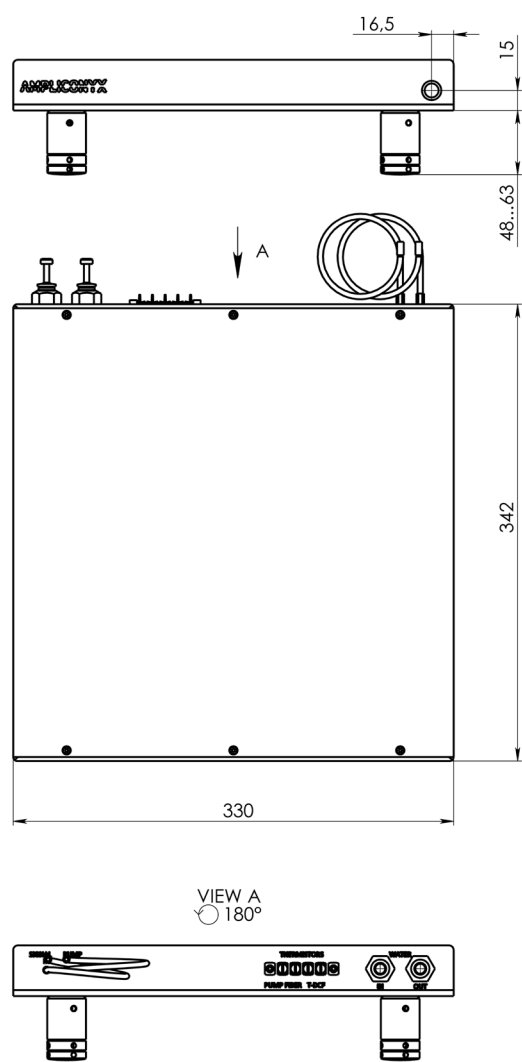
Wavelength MFD Signal fiber: PM980XP others upon request

Example: AMPX - TGMC - 1040 - PM980XP

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PERFORMANCE,
DIMENSIONS

DIMENSIONS



EXAMPLE AMPLIFICATION

90 mW, 20 MHz, 50 ps input signal

