

LASERS OF GNIK-3 SERIES

Lasers of GNIK type represent gas helium-neon lasers of continuous operation mode with emission in infrared band of optical spectrum at 1.15 μm , 3.39 μm , 5.4 μm wavelengths, multimode with emission power in range 1.5 mW to 23.0 mW, having polarized and non-polarized emission.

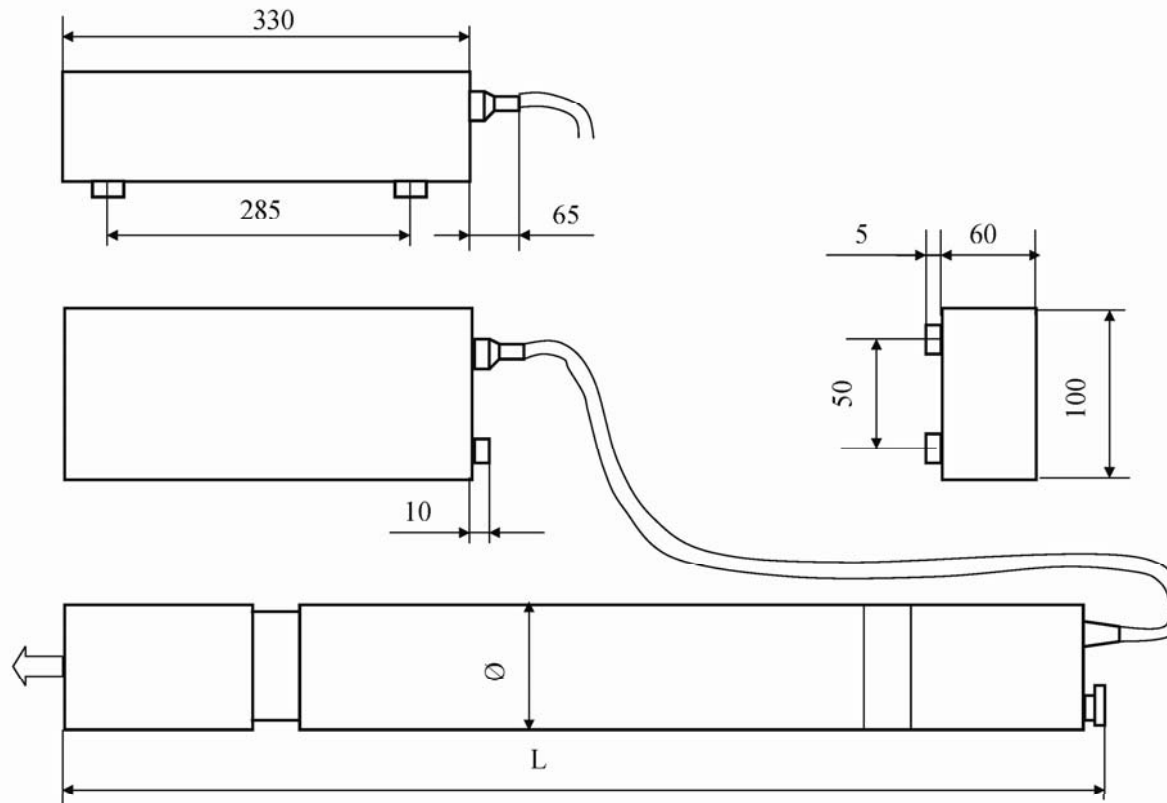
The lasers demonstrate all advantages of low-intensity and highly directional monochromatic emission at spectral lines, which are congruent with absorption lines of environment-damaging releases of industrial facilities, including methane, nitrogen oxide etc. Such matching allows taking them as a basis for development of highly effective gas analyzers and gas existence or leakage detectors. In addition, they may be used in covert alarm systems and fiber-optic communications.

Laser comprises of laser head and power supply. Coaxial tube, which at the same time represents a holder of cavity mirrors, is a basis of the laser head design. Coaxial tube has high working gas reserve in its ballast capacity, and this fact provides high life duration of such laser as a whole.



Parameters	GNIK-3-1	GNIK-3-2	GNIK-3-2A	GNIK-3-3	GNIK-3-3A	GNIK-3-4	GNIK-3-4A	GNIK-3-K
Wavelength, μm	3.3922	3.3922	3.3912	3.3922	3.3912	3.3922	3.3912	3.5
Output power, mW, not less	3.0	9.0	4.0	14.0	7.0	23.0	10.0	12.0
Spectral structure	TEM _m n							
Polarization	1:1 / 100:1		100:1	1:1 / 100:1		100:1	1:1 / 100:1	
Beam diameter, mm, not more	2.5	3.0		3.5		4.5		2.5
Beam divergence, mrad, not more	3.0	3.0		3.5		4.5		3.0
Power consumption, W, not more	40	65		110		120		65
Dimensions of laser head, mm, not more	Ø45x500	Ø56x685		Ø56x930		Ø56x1250		Ø55x930
Dimensions of power supply, mm, not more	100x65x330			152x110x340				100x65x330
Mass, kg, not more (laser head/power supply)	0.7 / 2.5	1.7 / 2.5		3.0 / 5.0		5.0 / 5.0		3.0 / 2.5
Warranty lifetime, h, not less	5 000							
Mean life, h, not less	25 000							

Dimensional drawing



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