

LGN-302 LASER

He-Ne gas laser of continuous operation mode with emission at two orthogonally polarized single-frequency components. It is intended to be used as a coherent emission source in interferometry, optical location, fiber communication, technological and laboratory facilities. Operation modes: I — orthogonally polarized single-frequency components are divided spatially, II — superposition of orthogonally polarized single-frequency components, III — one high-frequency component with vertical vector of polarization on the laser output. Frequency stabilization is performed by means of thermal control of the resonator length.



Parameters	LGN-302
Wavelength, μm	0.63
Spectral structure	single-frequency
Output power, mW, not less	0.7
Beam diameter, mm, not more	0.8
Beam divergence, mrad, not more	2.5
Relative power instability during 8 hrs of continuous operation, %, not more	2
Relative optical frequency instability, arbitrary units, not more	1×10^{-8}
Power supply	AC 220 V, 50 Hz
Power consumption, W, not more	30
Operating temperature range, $^{\circ}\text{C}$	+10 ... +40
Mean time to failure, h, not less	2000
Mean life, h, not less	10000
Dimensions, mm, not more	320×120×95
Mass, kg, not more	3.2

Dimensional drawing

