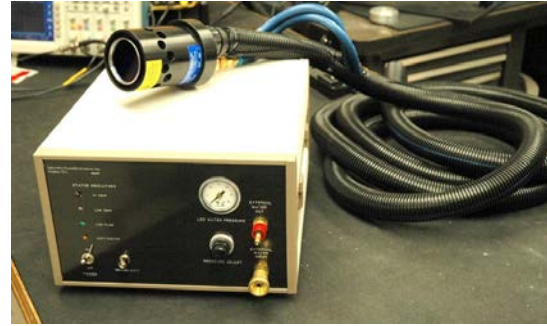


LM2XX-DMHP LED Light Source

(Product ID: LM2XX-DMHP-400, LM2XX-DMHP-460)

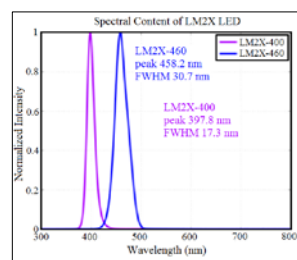
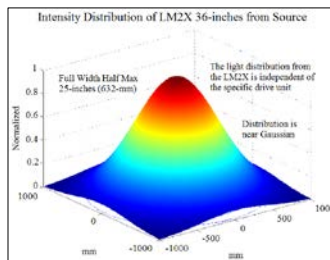
The LM2XX-DMHP is a 2-inch, water-cooled LED light source that provides uniform, stable illumination for Pressure and Temperature Sensitive Paint measurements. The unit is designed for lifetime systems by connecting to the DMHP driver box (module for lifetime). Operation is controlled by applying a TTL voltage to the external BNC on the DMHP module. In this mode the rise and fall times are less than 1- μ s and the duty cycle is 5%. The maximum pulse width is limited to ~1-ms. The LM2XX-DMHP has a built-in safety circuit to protect the LED head if these limits are exceeded. The light distribution from the unit is approximately Gaussian for distance greater than 18-inches [45-cm] from the source. The units are available in 400-nm and 460-nm packages, however, other wavelenths are available upon request. This unit surpasses the performance of an LM2X-DMHP air-cooled system as it offers a significant increase in power (~2 times that of an LM2X-DMHP). Maximum input pressure to the control box is 90 psi.

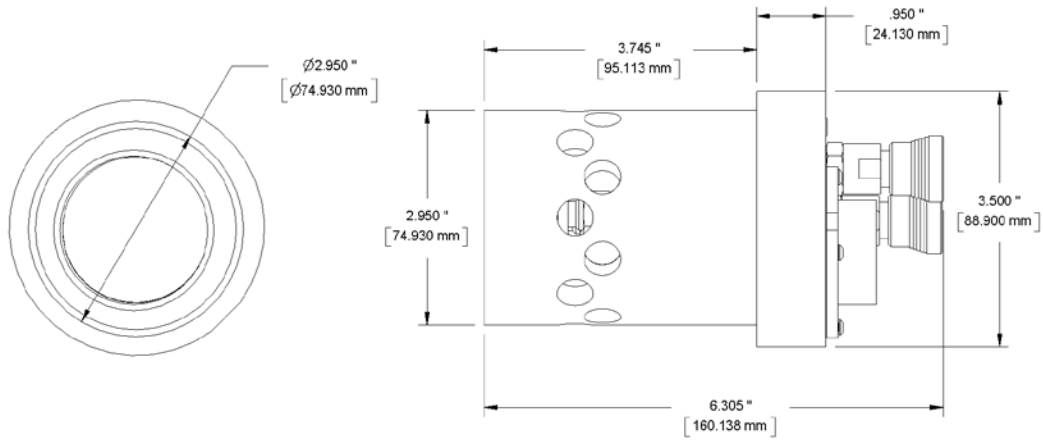


LM2XX-DMHP components: LED head, umbilical, and control box.

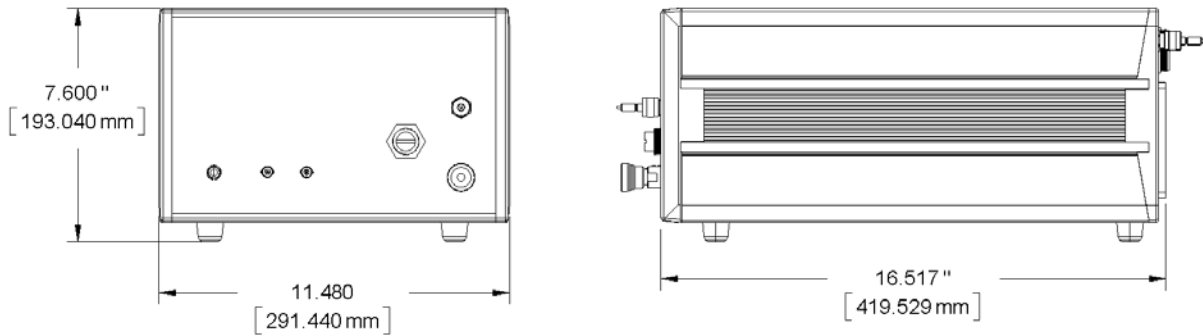
SPECIFICATIONS

Output power ~ 1.6-2.4 W @ 5% duty factor
 Stability..... ~0.1 % per hour after warm-up
 Maximum duty cycle 5%
 Maximum pulse width 1.0-ms
 Rise time (10% - 90%) < 300-ns
 Fall time (90% - 10%) < 125-ns
 Operating temperature range -10°C to 60°C
 Wavelength..... 400-nm and 460-nm
 FWHM..... +/-18-nm
 Umbilical Cable..... 10-ft (3.3m) / 20-ft (6.6m)
 ECCN EAR99





LED Head



LED Control Box and Power Supply