

JENOPTIK North America, Inc.

# JOB DESCRIPTION NUMBER: XXXX JOB TITLE: Laser Engineer II MANAGER: Dir Adv Sys REVISION DATE: 16JUN2022 LOCATION: 16490 INNOVATION DRIVE, JUPITER, FL

# SHIFT: FIRST SHIFT

## POSITION SUMMARY:

JENOPTIK Optical Systems in Jupiter FL designs, prototypes, and manufactures custom optical and electro-optic assemblies for a diverse set of customers in the defense, entertainment, biomedical, space, automotive, and semiconductor markets. The Advanced Systems Group is responsible for the development of electro-optic emitter, sensor, and laser assemblies; taking new products from design through low rate initial production (LRIP). The Advanced Systems group is looking for talented, motivated individuals to strengthen our growing team. The Advanced Systems Laser Engineer II will be responsible for providing technical support for laser and EO system and sub-system development efforts.

### <u>RESPONSIBILITIES INCLUDE</u> (BUT ARE NOT LIMITED TO):

- Participate in the design and development of novel emitter, sensor, and laser based electro-optical systems and sub-systems
- Independently integrate optical and electro-optical test setups
- Independently test electro-optic design concepts, analyze data, and report results
- Execute extensive performance, stability, and reliability testing as directed
- Independently execute initial prototype builds for electro-optical assemblies
- Support the identification, design, and/or acquisition of appropriate test equipment and essential assembly tools, jigs, and fixtures
- Support the transfer of build processes to manufacturing team
- Work with Program Management in support of active contracts
- Work with Production team to resolve build issues
- Support the Sourcing team with the selection of suppliers for components and supplier qualification
- Support the Sales team to troubleshoot customer issues, demonstrate hardware, and provide failure analysis
- Performs all other duties as assigned.

### MINIMUM REQUIREMENTS:

- B.S., M.S. or Ph.D. in Engineering, Physics, Optics or related scientific/technical area
- Three (3) or more years of hands-on industry or laboratory experience with assembly, alignment, test, and troubleshooting of lasers, electro-optical systems, and complicated optical setups (less experience considered)
- Familiarity with industry standard optical metrology and measurement equipment
- Knowledge of general laser principles including diode lasers, fiber lasers, and/or DPSS laser technology
- Knowledge of free-space beam propagation and shaping using reflective and refractive elements, fiber-optics, acousto-optics, and electro-optics
- Familiarity with optical components and materials from UV to IR
- Familiarity with the interplay of structural, optical, and thermal design features on system performance
- Ability to independently do comprehensive in-lab hands-on experimentation and data analysis
- Familiarity with common industry software tools such as Zemax, MatLab, Mathcad, Excel, BeamGage, Labview, Solidworks, and/or FRED.
- Experience independently completing technical tasks with minimal oversight
- Must possess the following "soft skills": Acts with Integrity, Attention to Detail, Clear Communicator, Prioritization/Multi-task, Self-Motivated, Team Player.
- Available for periodic travel to domestic and international customer and vendors. About 10%-20% travel time should be anticipated.
- U.S. Citizenship or qualified U.S. worker.



- Familiarity working with requirements for vacuum and semiconductor cleanliness environments a plus
- Familiarity in leading small multi-disciplinary teams a plus
- Familiarity with working in clean room environments a plus
- Familiarity with Laser and optical design and modelling basic principles a plus
- Familiarity with Laser Safety Protocols a plus
- Familiarity with electronics design, debug and/or test a plus
- Familiarity with development of SW for automation of data collection for test setups a plus
- Familiarity with System reliability and MTBF analyses a plus
- Familiarity with FMEA, and 8D process a plus

### PHYSICAL REQUIREMENTS:

The physical requirements described here are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

While performing the duties of this job, the employee is occasionally required to stand; walk; sit; use of hands or fingers to handle, or feel objects, tools or controls and keyboarding; reach with hands and arms; climb stairs; balance; stoop, kneel, crouch or crawl; talk and hear.

The employee must occasionally lift and/or move up to 50 pounds.