

Optomechatronics Engineer (光机电一体化工程师)

Company: **JD Union Pte Ltd**

Location: #07-06, 8 Boon Lay Way, Tradehub 21, Singapore 609964

Email: joan@jd-union.com

Company Profile:

JD Union Pte Ltd is a trusted leader in photonic products for laser material processing. We work with top suppliers to develop and test customized laser solutions in our own application lab. For more than 10 years, we've been the one-stop partner for system integrators—from MNCs to SMEs—delivering fast responses, expert support, and lasting partnerships that add value across the supply chain.

Job Description:

We are seeking a passionate Optomechatronic Engineer to join our team in the photonics and precision engineering industry. In this role, you will specialize in integrating optical, mechanical, and electronic systems to develop advanced laser and automation solutions for industrial applications. Your primary responsibilities will include designing, implementing, and testing system components that seamlessly bridge optics with motion control and automation technologies.

Responsibilities:

- Design and integrate optomechatronic subsystems, combining optics, mechanics, electronics, and software.
- Perform setup, alignment, and calibration of laser and optical systems.
- Program and integrate motion control platforms, including precision stages, galvo scanners, and robotics, for automated solutions.
- Collaborate with application engineers to develop and implement laser processing solutions.
- Create comprehensive technical documentation, including schematics, diagrams, and procedures.

Requirements:

- Bachelor's degree or higher in Mechanical Engineering (Mechatronics), Electrical Engineering (Automation/Control), Physics (Optics/Photonics), or a related field.
- Solid foundation in mechanical design principles and/or motion control systems.
- Hands-on experience with system integration is preferred.
- Strong problem-solving skills and a proven ability to collaborate on interdisciplinary projects.
- Relevant coursework in mechatronics, optics, photonics, or control systems is preferred.

We Offer:

- **Competitive Compensation & Benefits:** A comprehensive package including base salary, Annual Wage Supplement (AWS), performance bonus, and long-term incentives (LTI).
- **Extensive Benefits:** Full compliance with local regulations, plus comprehensive allowances for medical, transport, and mobile expenses, and complete insurance coverage.
- **Specialized Training:** Systematic, hands-on training in photonics applications using the latest laser and optical technologies.
- **Excellent Environment:** Modern, spacious office and lab facilities located near NUS, designed to inspire innovation.
- **Supportive Culture:** A collaborative team environment that values every idea and supports your professional and personal well-being.