

ML6600

cloud-powered laser solution platform

ML6600 is an established product platform, originally launched in 2013. ML6600 can host different laser technologies (diode, fiber, DPSS). Wavelength can be tailored from UV up to 2+ μm to your application.



Easy-to-integrate laser light source

ML6600 is a compact, easy-to-integrate laser subsystem which can be flexibly tailored to various applications, such as Flow Cytometry, Semiconductor Metrology, Quantum Computing, Diagnostics, Genetics, and various medical applications.

It's well suited for medical system integrators, as it's designed in accordance to IEC 60601-1 norm. This will speed up

the certification process. The lasers and the system are manufactured in ISO13485 certified fab.

The platform supports preventive maintenance with predictive analytics and machine learning algorithms, powered by Modulight Cloud. The network connection can be established via Wi-Fi, Ethernet or cellular connection.

Applications

- Flow Cytometry • Semiconductor Metrology • Quantum computing • Diagnostics • Genetics •

Wavelength range and optical output power and laser types

ML6600 supports Modulight's wavelength range from UV to 2000+ nm, and optical output powers up to 100 W, depending on the wavelength and laser type.

ML6600 platform can host multiple lasers of different wavelengths, or simply just one wavelength. When ordering, you may request any combination of wavelengths from the below tables, or ask Modulight sales team for more options.

Multimode: Visible wavelengths

Wavelength	405 nm	425 nm	445 nm	450 nm	488 nm	520 nm	532 nm	561 nm	577 nm
Optical Output Power	1.5 W	250 mW	3 W	3 W	4.5 W	1.5 W	3 W	2 W	1 W

Wavelength	630 nm	635 nm	638 nm	652 nm	658 nm	662 nm	665 nm	670 nm	680 nm	689 nm
Optical Output Power	3 W	4 W	6 W	5 W	6 W	6 W	6 W	6 W	6 W	6 W

Multimode: Infrared wavelengths

Wavelength	753 nm	810 nm	915 nm	980 nm	1064 nm	1122 nm	1375 nm	1470 nm	1550 nm	1927 nm
Optical Output Power	10 W	20 W	50 W	20...100 W	20 W	20 W	30 W	15 W	20 W	20 W

Single-mode: Ultraviolet wavelengths

Wavelength	266 nm	281 nm	290 nm	302 nm	355 nm	357 nm	395 nm	399 nm
Optical Output Power	10 mW	50 mW	70 mW	70 mW	100 mW	100 mW	100 mW	100 mW

Single-mode: Visible wavelengths

Wavelength	405 nm	423 nm	445 nm	455 nm	459 nm	488 nm	532 nm	556 nm	632,8 nm	640 nm	650 nm	660 nm
Optical Output Power	100 mW	100 mW	100 mW	100 mW	100 mW	100 mW	Up to 1 W	500 mW	100 mW	100 mW	100 mW	100 mW

Single-mode: Infrared wavelengths

Wavelength	760 nm	780,24 nm	784 nm	935 nm	976 nm	1040 nm	1131 nm
Optical Output Power	300 mW	300 mW	300 mW	300 mW	Up to 1 W	2 W	100 mW

Wavelength	1310 nm	1500 nm	1550 nm	1650 nm	1762 nm	1930 nm
Optical Output Power	100 mW	100 mW	2 W	30 mW	2 W	2 W

Package information

The mechanics of the ML6600 platform can be tailored to host various laser technologies, but also to enable drop-in replacement of existing laser sources. A couple of examples with a footprint 150x150 mm² and 220x220 mm² are shown here. Contact sales@modulight.com for detailed drawings and 3D-models.



Accessories

Compliance management - Modulight can assist the customer in compiling a sufficient design and manufacturing environment information to support in pursuing filing and approval for CE mark or other approvals for the system with ML6600 product incorporated. The ML6600 product is designed to comply with IEC60825 requirements, but it needs an additional STOP button and certification as a part of the final system.



Calibration service - The ML6600 devices are factory calibrated using NIST traceable calibration methods. Modulight recommends a 12-month calibration interval for the laser modules to verify and possibly adjust the output power of the laser module.



Power supply - The ML6600 devices are powered by supplying a DC voltage for the control electronics of the ML6600 unit. Modulight supplies compatible accessory DC power supplies that match the voltage and power requirements of each device.



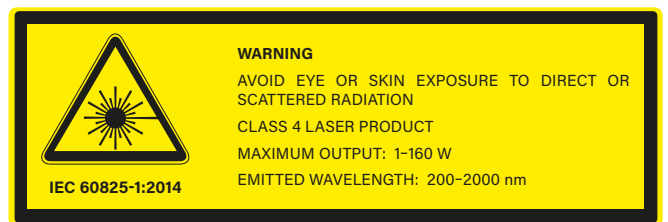
PC control software - For system integrators ML6600 is available as a subsystem which can be directly controlled with digital control signals through RS422, RS232 or Ethernet. Analog trigger signals are optionally available. ML6600 can also act as a stand-alone version, which comes with a PC software with elegant graphic UI.

Safety information

The laser light emitted from this laser device is visible or invisible, and it can be harmful to the human eye. Avoid eye and skin exposure to the beam, both direct and reflected.

Products are subject to the risks normally associated with sensitive electronic devices including static discharge, transients, and overload. Please ensure ESD protection prior to handling the products.

These Modulight products are not intended for use in systems where product malfunction can reasonably be expected to result in personal injury.



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