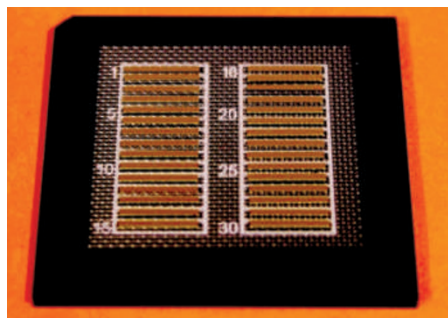


Near-infrared bar offers 20 W output

MODULIGHT



Finnish company Modulight has extended its RangerLase family of products with the ML1818 — a high-power near-infrared laser bar producing up to 20 W of continuous-wave output power at a wavelength of 1,470 nm. The product is also available as a bare-die single emitter with an output power of 800 mW (product code is ML1817).

The 1,470-nm lasers are mainly targeted at industrial and medical applications, like soft materials processing, plastic welding, fibre amplifier pumping and medical applications. As an option, both products are offered from chip level to packaged and fibre-coupled lasers, as are other Modulight products.

www.modulight.com

High-power diode suits bio-imaging

The new CUBE 660-100 laser from Coherent delivers 100 mW of continuous-wave output power at 660 nm, making it the highest-power red diode-laser module available from the company so far. CUBE lasers are based on a high-power, single-emitter diode laser. They integrate collimating and beam-shaping optics, drive and control electronics and TEC temperature stabilization to yield a turnkey module for use both by original equipment manufacturers (OEMs) and laboratories. This new CUBE laser is primarily intended for bio-imaging applications, where its higher power will enable improved signal-to-noise ratio or higher throughput.

The CUBE 660-100 offers the same performance and convenience features as its predecessors. These include built-in capabilities for analogue modulation with a bandwidth of 350 kHz, and digital modulation with a bandwidth of 150 MHz. It also features high-quality output, with a TEM₀₀ beam ($M^2 < 1.5$) and low noise (<0.2% r.m.s. from 20 Hz to 10 MHz). System integration of the CUBE laser is supported by USB, RS-232 and analogue signal input-output interfaces. These cover all status aspects of laser operation, including interlock operation, laser enabled, service output and internal power meter.

Furthermore, the compact, conductively cooled CUBE laser measures only 100 × 40 × 40 mm (3.9 × 1.6 × 1.6 in).

www.coherent.com

Integrated solution offers convenience

CVI Melles Griot has released the 26-CRH series compact laser head and universal controller system. In addition to a 50% reduction in footprint over previous versions, this new laser features three beam-size options to simplify optical system design, a true 'off' in modulation, and a new Universal Controller and power supply.

Melles Griot says that the 26-CRH series provides excellent output power and pointing stability at wavelengths of 408, 442, 642 and 658 nm. In addition to the highest standards in optical noise, power stability and pointing stability, the products offer digital modulation with rise/fall times to less than 200 ns; analogue modulation is also available for output-power adjustment. Custom wavelengths, output power, spot dimensions and electronic drive configurations are available on request. An OEM circuit board version of the Universal Controller is also offered.

The rectangular laser-head package, with dimensions of 90 × 40 × 40 mm, contains a semiconductor laser, thermal management system and beam-conditioning optics in a robust and reliable package configuration.

www.cvimellesgriot.com

White emitter expands LED range

Avago Technologies has added 3-W high-power cool-white (ASMT-M×20) and warm-white (ASMT-M×22) low-profile LEDs to its Moonstone family. Avago's ASMT-M×20/-M×22 surface-mount LEDs, which target designers of solid-state lighting applications, are capable of being driven at high currents with typical light output of 145 lm of illumination. These 3-W LEDs are ideal for use in streetlights, architectural, portable, retail and lighting applications.

Avago's ASMT-M×20/-M×22 Moonstone LEDs offer a wide, 120° viewing angle, good colour and light output uniformity, and low thermal resistance to maintain long-term device reliability. The low-profile design of these LEDs is also ideal for use in applications where height is a constraint. The ASMT-M×20/-M×22 LEDs are compatible with standard surface-mount technology reflow-soldering processes, and provide designers with ease of handling and more flexibility during assembly.

www.avagotech.com

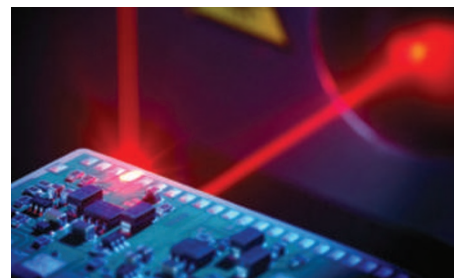
Red diode targets display applications

Japanese company Opnext has introduced what it claims is the world's first 640-nm red laser diode capable of emitting 60 mW. The HL6387TG laser diode can be built into miniature display systems, including those in personal computers, mobile phones and other mobile devices.

The 3.8-mm packaged laser diode emits a single longitudinal mode. The model incorporates a smaller package while retaining high reliability. The output power of the laser diode also remains constant despite the reduction in size. The wavelength band of the laser emission is 642 nm, which is optimal for use as a red light source in a display. The single longitudinal mode operation also enables the display of higher-resolution images by focusing the laser light into a small spot.

www.opnext.com

Fibre-coupled source gives turnkey answer



DILAS

DILAS Industrial Laser Systems has extended the power of its COMPACT series of fibre-coupled, turnkey diode laser systems to 500 W output at 980 nm from a 400-µm fibre.

The device is based on a fibre-coupled module using DILAS's conduction-cooled laser diode bars. It comes with an industrial water-to-air chiller, power supply and an integrated control unit. The turnkey diode laser system is controllable by 24-V interface signals, and its compact 19-inch rack mounts make it easy to integrate into OEM equipment.

Using a QBH high-power fibre, the COMPACT 500/400 delivers 500 W of cladding-free optical power and is an ideal source for fibre laser pumping, materials processing and medical applications. Up to power levels of 100 W, the COMPACT series is also available air-cooled with a shape memory array (SMA) fibre. DILAS Industrial Laser Systems can incorporate all available wavelengths into the COMPACT series, ranging from 640 to 2200 nm. The system includes a 5-m metal-armoured fibre, optical imaging unit and laser warning lamps.

www.dilas.com