

## Project

High-tech learning made seamless with VCC's illuminated solutions

## Application Characteristics

When it comes to educating the next generation of workers in high school or even college, technology has come a long way in enabling more interactive learning experiences. Devices that can be used for experiments such as measuring force, acceleration, magnetic fields, pressure, conductivity and Ph and temperature are more high-tech than ever.

The old-school components that attach to physical objects or hold liquid now have the ability to connect to laptops and tablets through either Bluetooth or USB cables to show readings to students in real-time. In many cases, multiple devices can be connected simultaneously to provide even more accurate readings.



These devices must be simple for teachers and students, who already have enough to learn without worrying about how to operate these colorimeters, and other scientific instruments.

## Application Requirements

To ensure accessibility to a wide range of college, high school and middle school science departments, these devices must also be affordable, durable and intuitive.

VCC offers a line of illuminated solutions that are perfectly suited for the devices that enable hands-on learning, including:

### LFB Series

The LFB Series light pipes provide maximum light transmission at a wide viewing angle, perfect for a classroom setting with multiple viewers. With a diffused surface and easy push-through design, the LFB Series is made up of optical-grade polycarbonate for enhanced safety and durability during operation.



LFB Series

Available in 3mm with a wide range of light pipe lengths, from 3.2mm to 25.44mm to accommodate device design. Of course, custom lengths are also available for additional design flexibility.

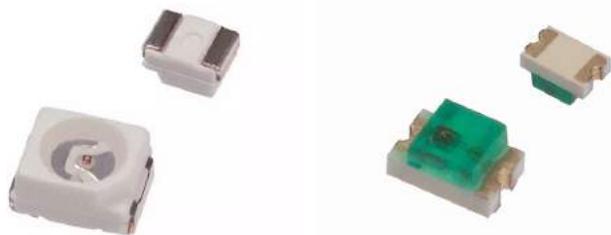
## Are you ready for next level illuminated components?

## LEDs

Illuminate your display panels with high-intensity LEDs in a range of mounting options, sizes, lenses and colors to accommodate virtually any equipment design.

### Surface-mount LEDs

VCC offers hundreds of surface-mount LED products that are suitable for scientific and educational device applications, and recommends the CMD67-21 Series, 0805 and 1206 LEDs due to their:



CMD67-21 Series

0805

- Compact shape
- Viewing angles
- Color options (including bi-color for streamlined panel design)
- Brightness
- Long life

### Through-hole LEDs

For equipment designs that include through-holes, VCC's LTHXMM12V Series and 5650 Series are the ideal light pipe fit in any application. They are also available in a wide range of colors.



LTH Series

## Results & Benefits

VCC products offer a wide range of benefits for users and manufacturers in illuminating colorimeters and other scientific measuring devices:



### For students and teachers:

- Bright, easy-to-understand indication for teachers and students
- Easy maintenance (not that they will need to be maintained)
- Enhanced learning experience via technology-enabled devices
- Longer device life thanks to durable components

### For manufacturers:

- Streamlined assembly with press fit design and tool-free assembly
- Varying light pipe lengths to fit the design perfectly without losing any light
- Durable, long-lasting operation that enhances product quality
- Streamlined manufacturing with a wide range of standard light pipe lengths available

## Value-added Service

VCC has the experience and innovative products to help address any challenges associated with technology-enabled device design.

Our team works closely with manufacturers to provide an effective and efficient solution, whether it's standard or custom.

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