

What does Light Microscope mean? Transmission electron microscopes (TEMs) offer detailed visuals of the inner composition of cells and materials. This enables scientists to observe more intricate features in the composition of materials and living organisms. A light microscope consists of fundamental parts such as a source of light, lenses, and a platform for positioning the specimens. It possesses significantly greater magnification and resolution capacities compared to light microscopes, with the ability to magnify up to two million times. Two primary types of electron microscopes are transmission electron microscopes (TEM) and scanning electron microscopes (SEM). SEMs provide 3D visuals of specimen surfaces, beneficial for material sciences and industrial uses. The light microscope enables us to observe cells, bacteria, and other microorganisms that are not discernible with the naked eye. Light microscopes are unable to show the detailed structure of cells or viruses because they rely on visible light.