



COLONY COUNTER

The purpose of colony counting is ultimately to estimate the number of cells present based on their given ability to continue to grow and expand under certain conditions like temperature and the state of the nutrient medium.

- In clinical, food, dairy, and pharmaceutical microbiology, taking a total microbial count or total viable count is a standard practise
- Traditional manual methods for counting bacterial colonies (or colony forming units) are laborious, time consuming, and require a high level of focus
- Colony counter offers an alternate, sustainable solution to this issue by facilitating the rapid and precise counting of colonies
- A colony counter is an equipment used to count colonies of microorganisms growing on agar plates

TECHNOLOGY PARAMETERS

The Volume of LED	0-9999
The Height of the Word	15mm (6")
Light Power	15W
Total Power	40<W
Voltage	AC100-240v (50/60Hz)
Colony Center Diameter	ø155mm
Suitable Petri Dish	ø50mm - ø150mm
Dimension	360 x 300 x180mm
Weight	4kg

Note: Have the function of counting in bi-directional



PARTS OF THE COLONY COUNTER:

1. **Light source:** A source of backlight is utilised for illuminating reasons.
2. **Auto marker probe pen:** When a counter pen is pressed against a colony, a beep is heard and the count is shown on a computer screen.
3. **Digital display:** It shows how many times the counter pen has been used.
4. **Lens:** It helps make things bigger.

COLONY COUNTER PRINCIPLE:

- A model of a manual colony counter works by putting a Petri plate on an electronic pressure pad with lights and marking each colony by touching the plate with a felt tip pen.
- The digital display shows a number based on how hard you touch it. The pressure can be changed depending on what is needed.
- With this model, you won't miss counting colonies or count them twice. The instrument also comes with a Wolfhugel graticule, a segmentation disc, and centering adapters for 50-90 mm plates.
- This model has some extra features, such as a dark background for colonies that are translucent, glare-free lighting, and a built-in average function that lets you count colonies on more than one plate.
- The software makes the average number of colonies and changes the background with a toggle switch. Using USB connectivity, the data about the counted colonies is sent to the computer.
- Colonies can be small and crowded, which makes it hard to count.
- So, breaking the counting up into small squares and using a magnifying glass on a flexible arm to see the colonies better makes the job a little bit easier.
- This method for counting colonies has a very low output and takes a lot of time. Also, the number of colonies can be different when more than one technician counts.