**Brief Product Description**
The CellaVision DC-1 is designed to automate and simplify the process of performing blood cell differentials in low-volume laboratories. The system leverages high-speed robotics and digital imaging to automatically locate and capture high quality images of cells. It allows both standalone and networked installation.

**Principles and Technology**
The analyzer automatically analyzes a prepared hematology slide under the microscope. The analyzer looks for a monolayer in the smear and once found scans the monolayer in a battlement pattern. While doing this, the analyzer locates WBCs and RBCs and stores high quality images of each located cell. The analyzer pre-classifies each located WBC and pre-characterization of RBC morphology for operator review.

**Parameters**

**WBC Classification**
The CellaVision Peripheral Blood Application automatically pre-classifies WBCs into these classes:
- Band neutrophils
- Segmentated neutrophils
- Basophils
- Eosinophils
- Lymphocytes
- Monocytes
- Promyelocytes
- Myelocytes
- Metamyelocytes
- Blast cells
- Lymphocytes variant forms
- Plasma cells

The CellaVision Peripheral Blood Application also automatically pre-classifies non-WBCs into these classes:
- Nucleated RBC
- Giant thrombocytes
- Thrombocyte aggregations
- Smudge cells
- Artefacts
- Not Classed
- Other

The operator can manually re-classify cells and other objects to any of the above mentioned classes and also to any of the 15 user-defined cell classes.

**RBC Morphology**
The CellaVision Peripheral Blood Application pre-characterizes the RBC morphology by shape, color and size and suggests preliminary grading for these morphological characteristics:
- Polychromatic cells
- Hypochromatic cells
- Anisocytosis
- Microcytes
- Macrocytes
- Poikilocytosis
### Parameters

The operator can change the suggested grading for the above mentioned characteristics and can also manually specify grading for these morphological characteristics:

- Target cells
- Schistocytes
- Helmet cells
- Sickle cells
- Spherocytes
- Elliptocytes
- Ovalocytes
- Teardrop cells
- Stomatocytes
- Acanthocytes
- Echinocytes
- Howell-Jolly bodies
- Pappenheimer bodies
- Basophilic stippling
- Parasites
- Up to 10 user-defined characteristics

### Platelet Estimation

When performing a platelet estimation, the analyzer captures an overview image of the RBC monolayer. The operator can count the number of platelets or estimate the platelet concentration in the overview.

### Throughput

Up to 10 slides/hour for complete differential

**NOTE:** Processing time may vary depending on smear quality, WBC concentration and number of non-WBCs.

### Quality Control

One freshly stained slide from a blood sample with a WBC count within the normal range to perform a daily cell location test.

### Dimensions and Weight

11" (W) X 15.4" (D) X 14.6" (H); 24 LBS

### Supported Optional Software