

**Specifications for Rotarod with Acceleration mode for neuromuscular coordination analysis:**

1. The system should be able to work for mice as well as rat just by changing the rotor and some partitions.
2. The system should have five compartment model and the instrument should have provision to adjust lane width for mice and rat model.
3. The system should have detection of fall by plate type sensor and individual lane timers (0-999.9s) with resolution of 0.1s
4. The system should have electronic rotor speed adjustment-constant speed (0.1-80rpm) and software for data collection
5. The system should have rotor which are easily replaceable.
6. The system should have 3 different modes-Normal mode, Acceleration 1 and Acceleration 2 and also reverse-forward direction selection mode.
7. The system should have touch screen display with functions such as password protected system, cut-off time, auto experiment number, password protected delete mode, Experiment title, comments can be entered, graphical presentation of data, test ID can be assigned to compartment for animal groups, PC connectivity software with report generation in pdf, transfer of data to excel & calibration report generation facility.
8. The system should record the parameters such as distance travelled in centimetres, falling RPM, Time spent on rod
9. The system should have following features
  - Animal: Mouse and Rat
  - Number of Lanes: 5
  - Rotor speed accuracy:  $\pm 1.0$  rpm
  - Rotor speed resolution: 0.1 rpm
  - Falling time: 0-999.9 sec (resolution-0.1 sec)
  - Distance travelled: 0.1cm to 99999.9 cm
  - Rotor diameter: Mouse: 30 mm, Rat: 60 mm
  - Lane width: Mouse: 50mm, Rat: 76 mm
  - Falling height: Mouse: 225mm, Rat: 240mm
  - Lane separator Diameter: 290 mm
  - Display: 4.3 inches TFT, Touch screen
  - Material of construction: Acrylic
  - RS232 Cable with convertor
10. The supplier should be an ISO 9001:2015, ISO 14001:2015, ISO 13485:2016 certified company
11. The supplier should provide the list of Publications available.
12. The supplier should provide IQ, OQ, PQ documents.
13. The supplier should provide minimum 3 installation certificate/ Performance certificate from Government research institutes.
14. The supplier should be **CE** certified.