DIGITAL GRIP STRENGTH METER

For studying neuromuscular functions in rodents

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DIGITAL GRIP STRENGTH METER

For studying neuromuscular functions in rodents

The Grip Strength Meter measures the muscle strength in both forelimbs and hind limbs, allowing assessment of neuromuscular function.

The system can be used to study effects of hormones, toxins, muscle relaxants as well as disease or the aging process on the muscular strength of the animal. The system can be configured for rats, mouse or other small laboratory animals.

Basically, the grip strength meter is positioned horizontally and the subjects are held by the tail and lowered towards the apparatus. The animals are allowed to grasp the metal bar or grid and are then pulled backwards in the horizontal plane. The force applied to the bar or to the grid just before it loses grip is recorded as the peak force. This force can be measured in Kgs/Grams, Newton or lbs.

Systems for measuring grip strength of both front limb as well as hind limbs of mice & rats are available.

Applications:
- Motor Phenotyping
- Drug Screening
- Neuromuscular Diseases
- Parkinson Disease
- Huntington Disease
- Aging

*For India only due to restrictions of battery transportation

Features:
- Pre Calibrated easy to use system.
- High accuracy and resolution.
- Automatically stores the peak force achieved by the limbs.
- Each system supplied with 2 sets of grips for mice and rat.
- Fit to Rats & Mice with a simple change of Grip Accessories.
- Stand alone system, no need of computer.
- Zero key to make readings zero during operations.
- PC Connectivity with Software using USB cable for data analysis & report generation.
- Inbuilt weight calibration & calibration report generation facility.
- Instrument operates on rechargeable battery*.
- Digital TFT Display.
- In-built Memory up to 150 Readings can be saved.
- Free to set upper and lower deviation data, automatically determine whether or not qualified.
- Three units for measurement available gfs/N/ lbf.
Software Features:

- Provision to add experiment name, instrument serial number, test ID, animal sex and animal start number and animal end number setting, so that no need of manual entry of animal number for each animal.
- Software will automatically create the rows from selected animal start number up to the last animal number.
- Averaging option: Software will automatically give average of 3 readings if needed.
- Error code option: Errors like instrument error, wrong animal number and repeat trial can be coded in front of a particular reading if needed.
- Data can be converted to excel & Pdf file for further analysis.

System Specifications & Models:

<table>
<thead>
<tr>
<th>Specifications</th>
<th>GSM 01RS</th>
<th>GSM 02RS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capacity</td>
<td>2000gf</td>
<td>2000gf</td>
</tr>
<tr>
<td>Resolution</td>
<td>0.1gf</td>
<td>0.1gf</td>
</tr>
<tr>
<td>Accuracy</td>
<td>±0.2%</td>
<td>±0.2%</td>
</tr>
<tr>
<td>Display</td>
<td>TFT</td>
<td>TFT</td>
</tr>
<tr>
<td>Battery</td>
<td>Rechargeable batteries*</td>
<td></td>
</tr>
<tr>
<td>Unit</td>
<td>Gram/N/lbs</td>
<td>Gram/N/lbs</td>
</tr>
<tr>
<td>Useful For</td>
<td>Forelimbs</td>
<td>Forelimbs &amp; Hindlimbs</td>
</tr>
<tr>
<td>PC Connectivity</td>
<td>Through USB</td>
<td>Through USB</td>
</tr>
<tr>
<td>Material of Composition</td>
<td>Methacrylate, S.S. 304</td>
<td>Methacrylate, S.S. 304</td>
</tr>
<tr>
<td>Certifications</td>
<td>CE Compliant</td>
<td>CE Compliant</td>
</tr>
<tr>
<td>Power Requirements</td>
<td>220/230V AC 50Hz</td>
<td>220/230V AC 50Hz</td>
</tr>
<tr>
<td></td>
<td>110/120V AC 50-60Hz**</td>
<td>110/120V AC 50-60Hz**</td>
</tr>
</tbody>
</table>

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**Needs to be specified in order information

Note: Orchid’s continuing product development makes specifications subject to change without prior notification.

Software Report Formats:
<table>
<thead>
<tr>
<th>Model</th>
<th>Useful For</th>
<th>Sensor</th>
<th>Accessories</th>
</tr>
</thead>
<tbody>
<tr>
<td>GSM 01 RS</td>
<td>Forelimbs</td>
<td>One sensor unit with USB port</td>
<td>1 set of grip for mice: Standard Grip, T grip</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1 set of grip for rat: Standard Grip, T grip</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Height Adjustable stand</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Software for PC Connectivity</td>
</tr>
<tr>
<td>GSM 02 RS</td>
<td>Forelimbs &amp; Hindlimbs</td>
<td>Two sensor units with USB port</td>
<td>2 sets of grip for mice: Standard Grip, T grip</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2 set of grip for rat: Standard Grip, T grip</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
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Contact US

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