# **Digital Grip Strength Meter**

## FOR STUDYING NEUROMUSCULAR FUNCTION 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 the 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 backward 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 Kg/Gram, Newton, or lbs. Systems for measuring the grip strength of both front limbs as well as hind limbs of mice & rats are available.



Designed To Measures The Muscle Strength In Both Forelimbs And Hind Limbs, Allowing Assessment Of Neuromuscular Function.





#### FEATURES:

- Pre Calibrated easy to use system
- High accuracy and resolution
- Automatically stores the peak force achieved by the limbs
- Each system is supplied with 2 sets of grips for mice and rat
- Fit Rats & Mice with a simple change of Grip Accessories
- Stand-alone system, no need for a computer
- Zero key to make readings zero during operations
- PC Connectivity with Software using a 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 gf/N/ lbf

#### **APPLICATIONS:**

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

Note - For India Only Due To Restrictions On Battery Transportation.

#### SOFTWARE FEATURES:

- Provision to add experiment name, instrument serial number, test ID, animal sex, animal start number, and animal end number setting, so that no need for manual entry of animal number for each animal.
- Software will automatically create the rows from the selected animal start number up to the last animal number.
- Averaging option: Software will automatically give an 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 SPECIFICATION & MODELS:

Specifications	Model		
	GSM 01RS	GSM 02RS	
Capacity	2000gf	2000gf	
Resolution	0.1gf	0.1gf	
Accuracy	±0.2%	±0.2%	
Display	TFT	TFT	
Battery	Rechargeable batteries*		
Unit	Gram/N/Ibs	Gram/N/lbs	
Useful for	Forelimbs	Forelimbs & Hindlimbs	
PC Connectivity	Through USB	Through USB	
Material of composition	Methacrylate, S.S. 304		
Certifications	CE Compliant		
Power requirements	220/230V AC 50Hz, 110/120v AC 50-60Hz**		

\*For India Only Due To Restrictions Of Battery Transportation

\*\*Needs to be specified in order information

#### SOFTWEAR REPORT FORMAT:





#### **ORDERING INFORMATION:**

Product	Useful For	Sensor	Accessories
GSM 01 RS	Forelimbs	One sensor unit with USB port	<ul> <li>1 set of grip for mice: Standard Grip, T grip</li> <li>1 set of grip for rat: Standard Grip, T grip</li> <li>Height Adjustable stand</li> <li>Software for PC Connectivity</li> </ul>
GSM 02 RS	Forelimbs & Hindlimbs	Two sensor units with USB port	<ul> <li>2 sets of grip for mice: Standard Grip, T grip</li> <li>2 set of grip for rat: Standard Grip, T grip</li> <li>Height Adjustable stand</li> <li>Software for PC Connectivity</li> </ul>

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



### **Orchid Scientific & Innovative India Pvt. Ltd.**

- **O** B-59, M.I.D.C., Ambad, Nashik 422010, India.
- **(**+91253-2387600, 2972525
- office@orchidscientific.com, exports@orchidscientific.com
- www.orchidscientific.com

