

SONA 1.5 SERVICE ROBOT



MODEL: SONA 1.5 SERVICE ROBOT
BRAND MAKE: CLUB FIRST

Specification:

Laser Imagine Based Navigation

- *Ultrasonic/IR/Heat/Clif Sensors (Optional)*
- *Smart Obstacle Avoidance technology*
- *Vison Camera for face detection*
- *Spin based CG(Centre Of Gravity) balancing*
- *Auto docking charging system*
- *9Hrs/ 4Days standby battery backup*
- *Simulate up to 15kg load*

Key Parameter:

- *Humanoid Service Robot Sona 1.5 have top speed .3m/s*
- *Navigate in any complex environment*
- *Self mapping and navigation technology with using Laser, Digital Compass & Digital Gyro*
- *Obstacle avoidance with laser mapping and detection*
- *Distance measuring system to achieve goal.*



- Spine based center of gravity balancing
- Camera Vision for 3D object detection (Optional)
- Voice Communication (Optional)
- Lift communication for multi floor access (Optional)
- Heat and over load protection
- Efficiency Exhaust protection
- Down stairs detection with CLIF sensors (Optional)
- Auto charging docking system
- Auto Recovery Behaviors in any troubleshooting
- Options for HDMI/ USB / Ethernet / Touch screen (Optional)

Technical Specification:

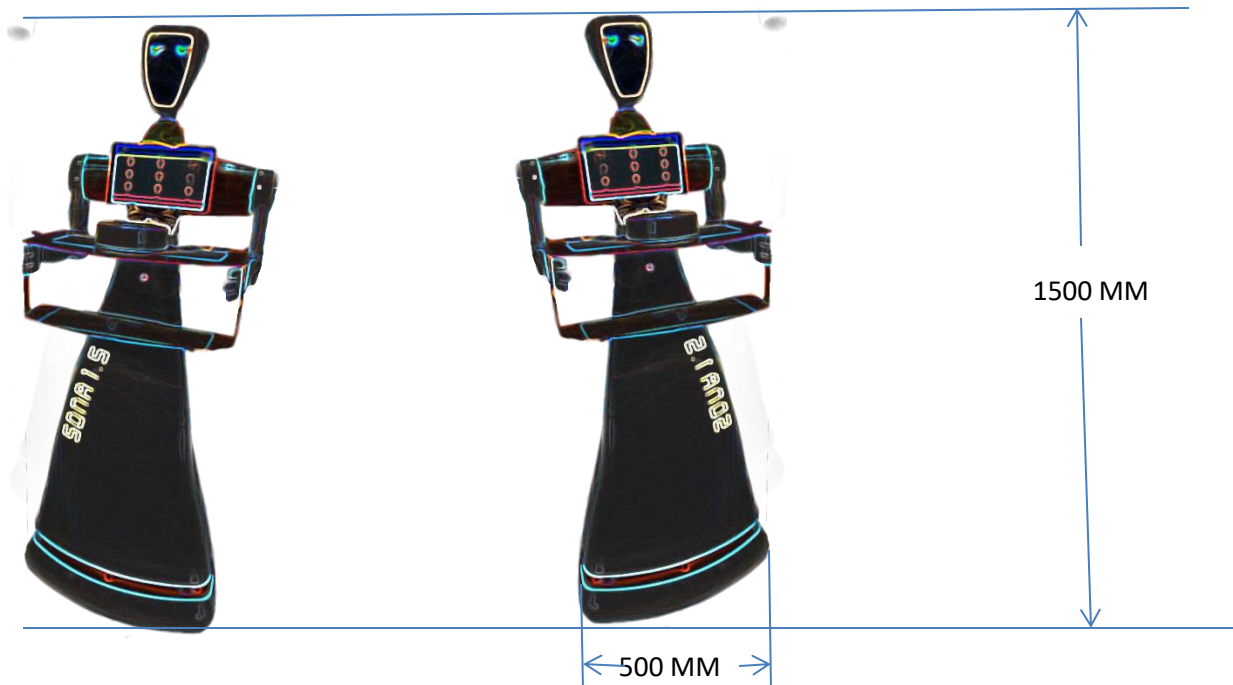
Robo Base: 2.5 MM dual MS powder coated base

Body Material: 1.5mm thick FRP for heavy duty work

Spine: SS balanced spine for extra balancing tested at 100 kg weight with 10 mm deflection

Dimension: Sona 1.5 can fit a box of (1500 x 480 x500)L x W x H in MM

Total Weight: 18 Kg





CPU: CLUB FIRST robot core processor with 2GB RAM and 8GB Map Storage.

Battery: 25000 Mah Battery for 8-9 Hrs running Backup.

Service:

- 12 Months of Warranty for all spare parts including battery.
- Easy to replace spares make in India
- Proper training to operator
- Remote Service assistance and troubleshooting

Application: Restaurant Hotel Service, Reception, Hospitals & Educational training Purpose

Financial Consideration:

Model	3D Vision Camera	Voice	Auto Docking	Cliff PIR, Ultrasonic Sensor,	Planetary Gear Motor	Brush less DC Motor	Lift Access	Support options HDMI USB
Sona 1.5 FR 1					✓			
Sona 1.5 FR 2						✓		
Sona 1.5 FR 3	✓	✓	✓	✓		✓		✓
Sona 1.5 FR 4	✓	✓	✓	✓		✓	✓	✓

Gst: 18% /Installation & Transportation: As per Actual

• **General:**

No orders for products or services of Seller shall be binding upon the Seller unless accepted in writing by an authorized official at its Home Office. Any such order shall be subject to these terms and conditions of sale and acceptance of an order by the Seller shall be expressly conditioned on assent to such terms and conditions. No modifications to these terms and conditions or other conditions will be recognized by Seller unless specifically agreed to in writing and failure of Seller to object to provisions contained in any purchase order or other communications from a Buyer shall not be construed as a waiver of these conditions nor an acceptance of any such provisions. Receipt of Purchase Order from Buyer for products and services contained herein represents acceptance of these terms and conditions. No order accepted by Seller may be altered or modified by the Buyer unless agreed to in writing by the Seller; and no such order may be canceled or





terminated at any time after receipt of such order in writing by Seller. No assignment or delegation by the Buyer shall be binding on the Seller without Seller's consent.

- **Warranty:**

Seller warrants for a period of one (1) year or such period as may specifically be set forth in writing in Seller's proposal ("Warranty Period") that each new and unused product manufactured by it will be free of defects in material and workmanship. Seller will, within the Warranty Period, repair or replace any part found by it to be defective, provided that the product is installed and operated in accordance with Seller's instructions and (subject always to such instructions) in accordance with generally accepted industrial practices, and, further, provided that the product is used under normal conditions for which it was designed and that it receives due and proper care, lubrication, protection and maintenance under the supervision of competent personnel. Modification or repair of the gripper by the Buyer will void the guarantee. Prior to shipping back the product to the Seller, the Buyer must get a Returned Material Authorization (RMA) from the Seller. Seller does not guarantee robotic production rates or the quality of parts made using Seller's products. Under no circumstances whatsoever shall Seller be liable to any person, firm or corporation for any special, indirect or consequential damages, whether for breach of contract, negligence, misrepresentation or otherwise and whether resulting in lost profits, interest on money borrowed or invested, impairment of goods, work stoppage or otherwise, in any way arising out of the sale of any products or services by Seller to Buyer or any transaction to which these Standard Terms apply. The liability of Seller and the exclusive remedy of Buyer for any defect or breach or for any action relating to the sale of any products or services by Seller to Buyer, whether based in contract, negligence, strict liability, tort, breach of warranty, or otherwise, is limited, at Seller's option, to repair or replacement of the defective goods or services or refund of the purchase price therefore. The foregoing shall constitute the sole and exclusive liability of Seller and the sole and exclusive remedy of Buyer or anyone claiming on behalf of or through Buyer.

- **Technical Information:**

All illustrations, drawings, tables, graphs and the like issued by Seller or contained in Seller's catalogs, price lists, advertisements or any other publications must be regarded as close approximations only. Weights, measurements, capacities and all other particulars of products offered by Seller are stated in good faith as being approximate and no responsibility is accepted for their deviation from the approximations stated unless otherwise specified in writing in Seller's proposal or order acknowledgment.

- **Delivery:**

Delivery will be within 45 days from the date of Purchase Order, Delivery of products to a carrier at Seller's plant or other shipping point shall constitute delivery to Buyer and title shall pass at that time, regardless of freight payment. All risks of loss or damage in transit shall be borne by Buyer. Merchandise insurance against loss or damage in transit is the sole responsibility of the Buyer. Delivery promises are based on Seller's best judgment and Seller will attempt to fill orders at the agreed time. However, Seller shall not be liable for any damage claimed to result from any delay in delivery due to any cause whatsoever. Shipment and delivery dates are quoted in good faith and are approximate. Shipment and delivery dates are subject always to these Standard Terms and Buyer's timely compliance with these Standard Terms and such reviews and approvals as are required of Buyer. Seller shall not be liable to pay any penalty for a delay in shipment, nor shall it be bound by any provision for the payment of a penalty of any nature whatsoever claimed by reason of any delay in shipment unless it has expressly consented to such penalty provision in a writing executed by Seller.

- **Terms of payment:**

All the payment will be done in advance before delivery of product. Delays in transportation shall not extend any payment terms. Seller reserves the right to collect payment in part or in full as a condition of acceptance of an order from Buyer. Should the Buyer's financial responsibility become unsatisfactory to the Seller, cash payment or satisfactory security may be demanded by the Seller and in default of such cash payment or satisfactory security, deliveries herein may be discontinued at the option of the Seller and a charge rendered covering the value of any partially finished articles that are being manufactured on this order or contract. Seller retains all other remedies it may have as a result of Buyer's





unsatisfactory financial responsibility. When an account becomes past due according to its payment terms, interest will be charged at the greater of 1.50% per month (18% per year) or the maximum permitted by law until paid.

- **Taxes and Other Charges:**

Any manufacturer's tax, retailer's occupation tax, use tax, sales tax, excise tax, duty, custom, inspection or testing fee, transportation insurance or any other tax, fee or charge of any nature whatsoever, imposed by any governmental authority, on or measured by any transaction between Seller and Buyer, shall be paid by Buyer in addition to the prices quoted or invoiced.

- **Pricing Policy:**

Prices quoted are for acceptance within 30 days. Prices are based on running the full quantity for shipment at one time and to one destination unless otherwise agreed to in writing.

- **Errors and Variances:**

All clerical errors in Seller's quotations, acknowledgments and invoices are subject to correction.

- **Force Major:**

Performance by Seller under this order shall be extended or excused to the extent failure to perform is the direct or indirect result of any occurrence beyond Seller's control including, but not limited to, strikes, labor troubles, riots, floods, fires, earthquakes, storms and other natural disasters, accidents, shortage of cars, failure of production, supply, transportation or delivery of raw materials or the materials covered by this agreement.

- **Intellectual Property Protection:**

Buyer will respect the intellectual property (IP) rights of the Seller including but not limited to: patent, copyright, trade-mark, trade secret and industrial design. Should Buyer become aware of any infringement of Seller's IP rights, including any third party infringements, Buyer will immediately give notice to Seller.

- **Governing Law:**

The validity, construction and interpretation of all documents relating to this sale, and rights and duties of the parties hereto, shall be governed by the laws of the Jaipur Jurisdiction only.

