

SENSIA EX

Multi-Way Reach Truck • AC Power
2.0 – 2.5 tonnes

RBM20N2
RBM25N2

The wide load specialist... with narrow aisle agility

The Mitsubishi SENSIA EX multi-way reach truck range is ideal for precise and intuitive handling of wide and unusual loads of up to 2500 kg - and lifting up to 10 metres - in narrow aisles and on long shifts.

Six multi-directional travel modes, all-wheel steering and braking and powerful AC traction combine to deliver exceptionally agile, high-intensity performance. Its wide forks make long handling exact and effortless.

Comfortable and spacious, the award-winning SENSIA cabin, SDS and operator controls provides excellent all-round visibility and minimises operator fatigue.



Frame and body

- **Choice of 2000kg and 2500kg models** for optimum application configuration.

Mast and fork assembly

- **Smooth mast handling system on lift and reach** for steady, predictable and precise handling.
- **Wide fork positioner with up to 2200mm spread and fork tilt** for handling both long loads and standard pallets.
- **Passive Sway Control** dampens any elevated load motion by allowing the chassis to move slightly to compensate.
- **Lift heights up to 10 metres** for higher handling.

Drive

- **Six multiway driving modes, instantly selected by keypad** – reach truck, lateral, parallel, auto-transition, rotational and agile cornering.
- **Mitsubishi SDS (Sensitive Drive System)** provides intuitive driver-assist with graduated performance management according to steer angle, foot and finger actuator velocity - significantly contributing to safety.
- **Next-generation 360° load wheels** with independently controlled steer motors.
- **Load wheels turn within chassis leg profile** for added protection of wheels and loads.

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| Characteristics | | | | | |
|-----------------|---|----------------|------------------|------------------|-------------------|
| 1.1 | Manufacturer | | | Mitsubishi | Mitsubishi |
| 1.2 | Manufacturer's model designation | | | RBM20N2 | RBM25N2 |
| 1.3 | Power source: (battery, diesel, LP gas, petrol) | | | Battery | Battery |
| 1.4 | Operator type: pedestrian, (operator)-standing, -seated | | | Seated | Seated |
| 1.5 | Load capacity | Q | (kg) | 2000 | 2500 |
| 1.6 | Load center distance | c | (mm) | 600 | 600 |
| 1.8 | Load wheel axle to fork face (forks lowered) | x | (mm) | 337 | 337 |
| 1.9 | Wheelbase | y | (mm) | 1552 | 1552 |
| Weight | | | | | |
| 2.1 | Truck weight with load, with maximum battery weight | | kg | 6888* | 7784** |
| 2.3 | Axle loadings without load & with maximum battery weight, drive/load side | | kg | 2672 / 2 x 1108* | 2907 / 2 x 1188** |
| 2.4 | Axle loading, mast forward, with nominal load, drive/load side | | kg | 591 / 2 x 3148* | 521 / 2 x 3631** |
| 2.5 | Axle loading, mast retracted, with nominal load, drive/load side | | kg | 2292 / 2 x 2298* | 2292 / 2 x 2298** |
| Tyres | | | | | |
| 3.1 | Tyres: PT=Power Thane, Vul=Vulkollan, drive / load side | | | Vul | Vul |
| 3.2 | Tyre dimensions, drive side | | (mm) | Ø360 x 140 | Ø360 x 140 |
| 3.3 | Tyre dimensions, load side | | (mm) | Ø285 x 75 x 2 | Ø285 x 75 x 2 |
| 3.5 | Number of wheels, load / drive side, (x=driven) | | | 2+2/1x | 2+2/1x |
| 3.7 | Track width (center of tyres), load side | b11 | (mm) | 1384 | 1384 |
| Dimensions | | | | | |
| 4.1 | Fork tilt, forwards / backwards | α/β | ° | 2.0 / 6.0 | 2.0 / 6.0 |
| 4.2 | Height with mast lowered | h1 | (mm) | see table | see table |
| 4.3 | Free lift | h2 | (mm) | see table | see table |
| 4.4 | Lift height | h3 | (mm) | see table | see table |
| 4.5 | Height, mast extended | h4 | (mm) | see table | see table |
| 4.7 | Height to top of overhead guard | h6 | (mm) | 2190 | 2190 |
| 4.8 | Seat- or stand height | h7 | (mm) | 1030 | 1030 |
| 4.10 | Height of support legs | h8 | (mm) | 447 | 447 |
| 4.15 | Fork height, fully lowered | h13 | (mm) | 50 | 50 |
| 4.19 | Overall length | l1 | (mm) | 2630 | 2630 |
| 4.20 | Length to fork face | l2 | (mm) | 1480 | 1480 |
| 4.21 | Overall width | b1/b2 | (mm) | 1730 | 1730 |
| 4.22 | Fork dimensions (thickness, width, length) | s / e / l | (mm) | 50 / 120 / 1150 | 50 / 120 / 1150 |
| 4.24 | Fork carriage width | b3 | (mm) | 1700 / 2200 | 1700 / 2200 |
| 4.25 | Outside width over forks (minimum/maximum) | b5 | (mm) | 500-1700 / 2200 | 500-1700 / 2200 |
| 4.26 | Innerwidth of the support legs | b4 | (mm) | 900 | 900 |
| 4.28 | Mast reach | l4 | (mm) | 610 | 610 |
| 4.32 | Ground clearance at center of wheelbase, (forks lowered) | m2 | (mm) | 75 | 75 |
| 4.33/a | Working aisle width (Ast) with 1000 x 1200 mm pallets, load crosswise | Ast | (mm) | 2887 | 2887 |
| 4.34/b | Working aisle width (Ast3) with 800 x 1200 mm pallets, load lengthwise | Ast3 | (mm) | 2850 | 2850 |
| 4.35 | Turning radius | Wa | (mm) | 1787 | 1787 |
| 4.37 | Truck length including support legs | l7 | (mm) | 1982 | 1982 |
| Performance | | | | | |
| 5.1 | Travel speed, with / without load | | km/h | 14 / 14 | 14 / 14 |
| 5.2 | Lifting speed, with / without load | | m/s | 0.43 / 0.58 | 0.39 / 0.58 |
| 5.3 | Lowering speed, with / without load | | m/s | 0.50 / 0.55 | 0.50 / 0.55 |
| 5.4 | Reach speed, with / without load | | m/s | 0.1 / 0.1 | 0.1 / 0.1 |
| 5.8 | Maximum gradeability, with / without load | | % | 11.0 / 17.0 | 11.0 / 17.0 |
| 5.9 | Acceleration time (10 metres) with / without load | | s | 5.4 / 5.0 | 5.6 / 5.1 |
| 5.10 | Service brake | | | Mechanical | Mechanical |
| Electric motors | | | | | |
| 6.1 | Drive motor capacity (S2 60 min. short duty) | | kW | 7.5 | 7.5 |
| 6.2 | Lift motor output at S3 15% duty factor | | kW | 14 | 14 |
| 6.4 | Battery voltage/capacity at 5-hour discharge | | V/Ah | 48 / 775, 930 | 48 / 775, 930 |
| 6.5 | Battery weight | | kg | 1100, 1300 | 1100, 1300 |
| 6.6 | Energy consumption according to EN 16796 cycle*** | | kWh/h | 4.5 | 4.5 |
| Miscellaneous | | | | | |
| 8.1 | Type of drive control | | | Stepless | Stepless |
| 10.7**** | Level of noise at ear level of the driver according to EN ISO 4871 in work LpAZ | | dB(A) | 68 | 68 |
| 10.7.1**** | Level of noise at ear level of the driver according to EN ISO 487, drive/lift/idle LpAZ | | dB(A) | 80 | 80 |
| Body | Whole-body vibration (EN 13 059:2002) | | m/s ² | 0.5 | 0.5 |
| Hand | Hand-arm vibration (EN 13 059:2002) | | m/s ² | <2.5 | <2.5 |

* Weight values measured with 5700mm lift height mast & 775Ah battery

** Weight values measured with 10000mm lift height mast & 930Ah battery

*** Energy consumption values measured with 5700mm lift height mast

**** Inaccuracy of 4dB (A)

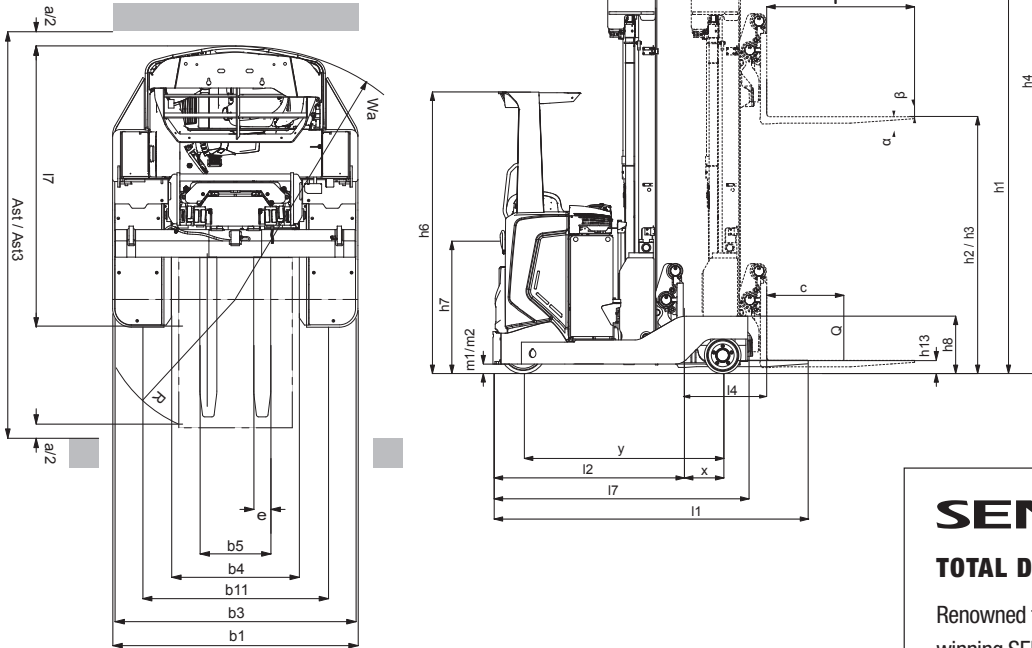
Continuing improvement may lead to changes in these specifications.

| Model | Battery Capacity | Battery Weight | 4.33 (1000 x 1200mm crosswise) Ast | 4.34 (800 x 1200mm lengthwise) Ast3 | L4 | L2 | L1 | x |
|------------------------------|------------------|----------------|------------------------------------|-------------------------------------|-----|------|------|-----|
| RBM20N2 & RBM25N2 | Ah | kg | mm | mm | mm | mm | mm | mm |
| | 775 | 1100 | 2887 | 2850 | 610 | 1480 | 2630 | 337 |
| | 930 | 1300 | 2887 | 2850 | 610 | 1480 | 2630 | 337 |

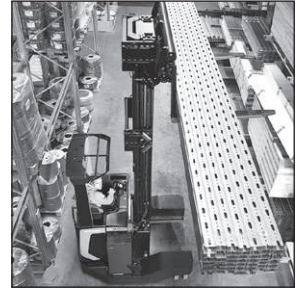
| RBM20N2 / RBM25N2 | | | | |
|-------------------|------|------|--------|-------|
| Mast Type | h1 | h2 | h3 | h4 |
| | mm | mm | mm | mm |
| TREV | 2510 | 1800 | 5400 | 6200 |
| | 2610 | 1900 | 5700 | 6500 |
| | 2677 | 1967 | 5900 | 6700 |
| | 2810 | 2100 | 6300 | 7100 |
| | 3043 | 2333 | 7000 | 7800 |
| | 3210 | 2500 | 7500 | 8300 |
| | 3377 | 2666 | 8000 | 8800 |
| | 3543 | 2833 | 8500 | 9300 |
| | 3710 | 3000 | 9000 | 9800 |
| | 3877 | 3167 | 9500 | 10300 |
| | 4043 | 3334 | 10000* | 10800 |

Ast = $Wa + \sqrt{(l6 - x)^2 + (b12/2)^2} + a$
 Ast3 = $Wa + l6 - x + a$
 l6 = Pallet length (1200 mm)
 b12 = Pallet width (800 or 1200 mm)
 a = Safety clearance = 2 x 100 mm
 TREV = Triplex with free lift

* only available for RBM25N2



Six agile travel modes

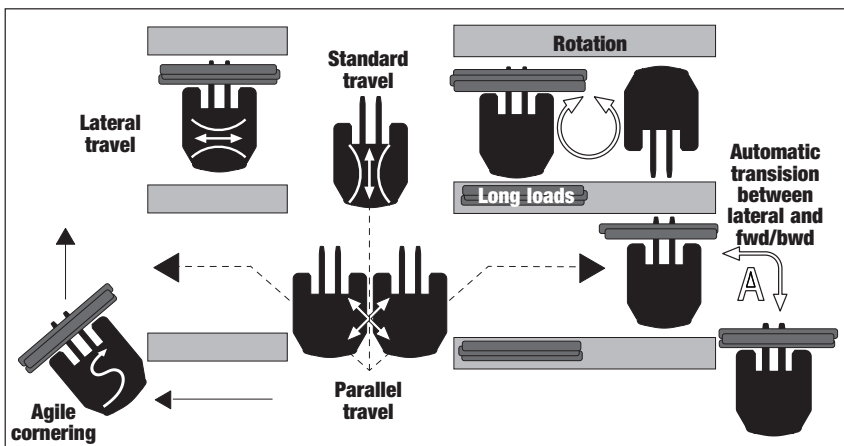


Precise handling of long loads



Fatigue-free operation

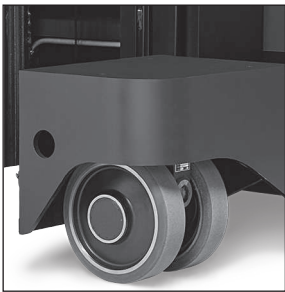
Six multiway driving modes <-> keypad buttons



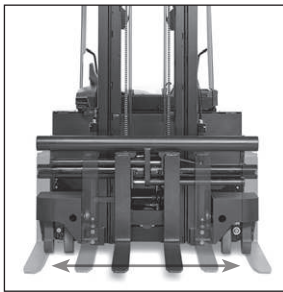
SENSIA

TOTAL DRIVER CONTROL

Renowned for their driveability, award-winning SENSIA reach trucks deliver class-leading performance in any workplace. The high performance SENSIA PRO mode allows experienced operators to maximise productivity, while new or temporary drivers can choose SENSIA's EcoLogic mode and extend shift life. Both benefit from SDS – Mitsubishi's Sensitive Drive System – that interprets their touch and further tailors truck performance to provide smooth operation. With a wealth of such smart design features, SENSIA reach trucks operators enjoy unparalleled comfort, unrivalled support ... and absolute control.



All-wheel steering and braking



Wide spread/tilt fork positioner



Rapid TruckTool tailoring and diagnostics

Steering system

- **Unlimited 360-degree all-wheel steering** gives precise control with minimal effort
- **Progressive steering** enables easy manoeuvring at low speeds and effortless control when moving at speed

Brakes

- **High-efficiency regenerative braking** means effective control and reduced brake wear.
- **Hydraulic load wheel brakes** deliver agile performance.

Hydraulics

- **Powerful AC hydraulic pump motor** provides smooth lifting and lowering.

Electrical and control systems

- **AC power on all motors** delivers smooth performance, high torque and precise control - through the longest shifts.
- **High performance ZAPI motor drive controller** delivers robust and efficient traction control.
- **Temperature control** in drive and lift motors and controllers prevents damage from overheating.
- **Battery rollers** make changes quick, easy and safe.

Operator compartment and controls

- **Spacious and comfortable operator compartment**, with clear views and fast, accurate fork positioning increases productivity and reduces risks of driver fatigue - even on the longest shifts.

Easy-access compartment

- **Easy-access compartment** with ergonomic hand bars, low non-slip step and entry provides safe and effortless entry and exit.
- **Folding steering wheel console** with adjustment for column length and angle, lifts fully upwards for easy access and ensures optimum position for each driver.

- **Multi-functional armrest with four-fingertip control** keeps control for reach, lift, tilt, fork positioning, direction and horn all at the driver's constant touch.

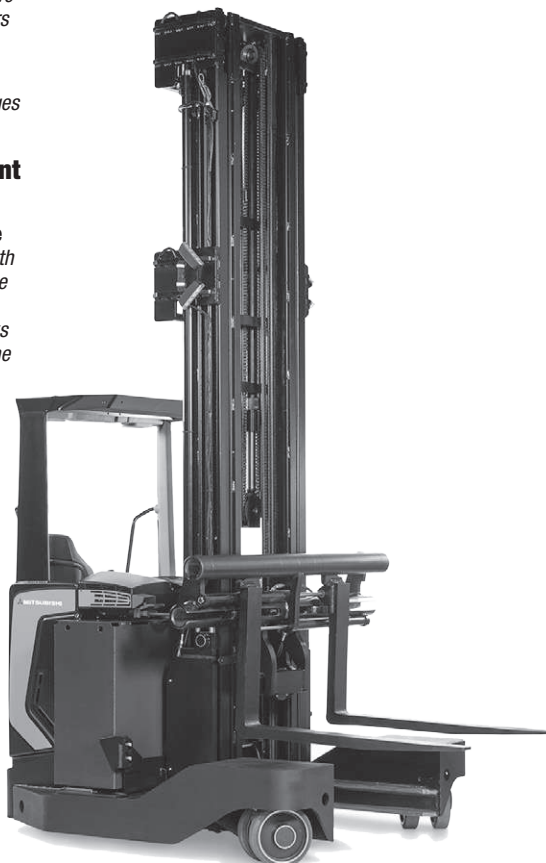
- **Multi-way-mode keypad control** is within driver's easy reach - for easy selection of its 6 travel modes.

- **Easy-to-understand display** communicates key information to driver including guidance, warnings and alarms - encouraging good practice.

- **EcoLogic and Professional modes (ECO/PRO) are quickly selectable by operator** for extended shift life or enhanced performance.

Options include

- **Choice of 2000kg and 2500kg capacities.**
- **Choice of masts up to 10.0m**
- **Choice of fork positioner widths** (1700mm or 2200mm)
- **BlueSpot pedestrian warning system** alerts co-workers to trucks operating nearby.
- **Working/drive lights** to improve visibility in dark environments
- **Choice of key switch or PIN code access.**
- **Load check scale** (+/- 50kg) helps driver to identify overweight loads.
- **Wide choice of seats, armrests and headrests** for maximum comfort and minimum fatigue.
- **Convenient USB Power socket** for phone charging or other 5V personal equipment.
- **Audio system and 3.5mm input jack** for MP3 player etc.
- **Quick, foot-operated battery-locking system**



ready to
perform
to your **applications**

Developed for outstanding performance and genuine value for money, the awardwinning* range of Mitsubishi forklift trucks and warehouse equipment is built to a higher specification to maximize productivity and ensure utter reliability... whatever the application.

Every model in our comprehensive, award-winning range of forklift trucks and warehouse equipment is built to a high specification and is designed to keep on working for you... day after day... year after year... whatever the job... whatever the conditions.

To ensure your truck stays in constant productive action, we have a network of local dealers - hand-picked for their commitment to customer care... and backed up by the Mitsubishi Forklift Trucks organisation. No matter where you are, we have a dealer close by - ready and willing to meet your needs.

That friendly local service covers everything configuration for your application to providing

packages, unbeatable warranties, long and short term hire, and highly responsive field service and repairs... as well as the industry's quickest and most reliable parts supply.

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* Mitsubishi Forklift Trucks has won **four** separate Fork Lift Truck Association Annual Awards for Excellence covering the areas of **Ergonomics**, the **Environment** and **Innovation**.



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NOTE: Performance specifications may vary depending on standard manufacturing tolerances, vehicle condition, types of tyres, floor or surface conditions, applications or operating environment. Trucks may be shown with non-standard options. Specific performance requirements and locally available configurations should be discussed with your distributor of Mitsubishi forklift trucks. Mitsubishi follows a policy of continual product improvement. For this reason, some materials, options