



BRAVO Electric Forklift
COMPACT DESIGN
HIGH ON PERFORMANCE

AGILE YET POWERFUL, DELIVERS WHAT IT NEEDS TO

Bravo Electric Series by Godrej is a modern solution to all your warehouse needs. It is specifically designed to drive productivity in demanding applications and narrow spaces. With its compact body and quick operations, it guarantees moving more pallets every hour, round the clock. This advanced piece of machinery is easier to operate, safer for the environment and moves quietly across your workspace.

1. Fastest travel speed of 15kmph, vis-a-vis Electric 4W and Diesel Forklifts

2. Compact machine with reduction in aisle width by 15%

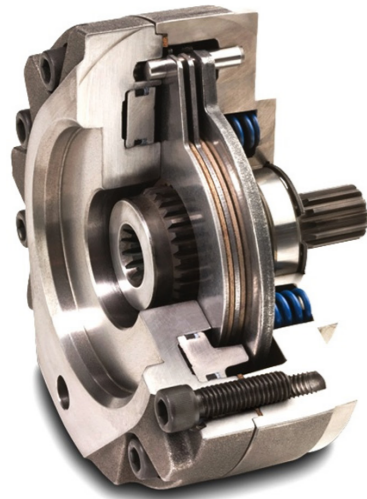
3. Best in class turning radius of 25% lesser than 4-wheeler forklifts

4. Productive as higher lifting speed maximises number of pallets moved per hour

5. Higher gradeability of 21% similar to that of Diesel forklifts



DESIGNED FOR OPERATOR'S CONFIDENCE, COMFORT AND CONTROL



Effective and Safe Wet Disc Brake

- Godrej Material Handling is the only Indian player to offer wet disc brakes, the most advanced and safe braking system with higher braking force and lesser stopping distance which ensures workplace safety.
- The powerful and effortless brakes reduce the pedal effort by half as compared to drum brakes, thus lesser operator fatigue.
- The long servicing interval of 6000 to 8000 hours makes the machine more reliable and increases productivity.
- Better heat dissipation with oil-cooled sealed system prevents brake contamination and corrosion, thus, extended brake life.



Easy Battery Roll Out System

Now a single operator can change the battery in quick and simple steps, yielding higher uptime.



25% Shorter Turning Radius

Twin Motors along with electronic differential are designed to rotate the drive wheels in opposite direction that provides a 25% lesser turning radius than 4-wheeler forklifts



Reliable LED Lights

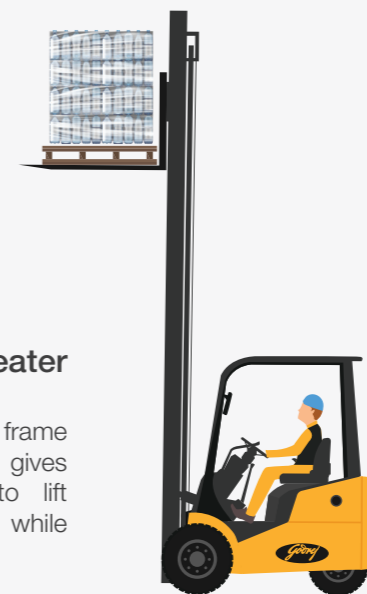
Bright LED lights provide reliable and intense optical illumination, ensuring safe operations even in low light conditions.

Easy Ingress And Egress

The low entry step, high overhead guard clearance and three-point contact, ensures the operator gets on and off the forklift truck safely and easily from both the sides.

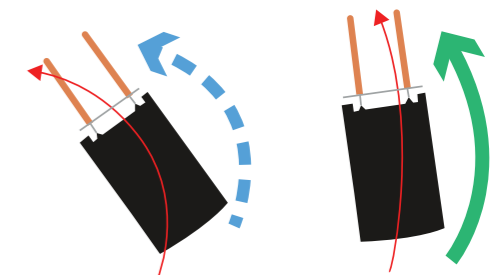
Accessible Emergency Stop button

In the unlikely event of an emergency, operator can push the Emergency Stop button at hand, which will cut the power supply of the truck bringing it to a halt immediately.



Higher Lift With Greater Stability

The innovatively designed frame with lower centre of gravity, gives the operator confidence to lift higher with better stability while maintaining safety.



Slow on Turns

Smart Curve Wheel Control Technology detects forklift turn movements and reduces speed up to 30% while turning, thereby providing enhanced stability and operator control in corners and cramped spaces.



Ergonomically Smart Controls

Ensuring the ease of operating forklift and keeping the driver in mind, all control levers are positioned smartly. This also reduces operator's fatigue.

Operator-friendly Driver Module

Adjustable seat, adjustable steering column and ample leg space keep operator stress and fatigue at bay, helping them stay focused and productive at work.

HIGH ON PERFORMANCE REGARDLESS OF SIZE



Fast Cooling System

Efficient heat dissipation system with extra cooling fans suitable for tropical climate ensure improved heavy-duty performance



Longer Runtime

Performance-oriented Higher Battery offers up to 648 Ah with improved battery life, and ensures maximum throughput even during demanding applications with higher load capacity at elevated heights.



Visibility Like Never Before

Wide view mast and low dashboard increases visibility by 25% for operator to conduct critical operations with confidence and precision.



Durable Hydraulic System

ORFS hydraulic joints to provides long lasting performance.



Easy Switch Between Modes When Required

Choose from three different performance modes of 'Slow' 'Normal' or 'Fast' customised to adapt to different applications and energy consumption.



AC Traction Motor For High Performance

AC traction motor with low friction gearboxes reduce energy lost. This means reducing overall battery consumption by 10% per charge



Efficient Energy Usage

Regenerative systems make more efficient use of energy by recovering battery energy during accelerator release and brake activation.



Improved Battery Technology

Bolt-on Type Cells in battery improve serviceability in the field. Epoxy coated battery container* reduces leakage loss and improves efficiency.



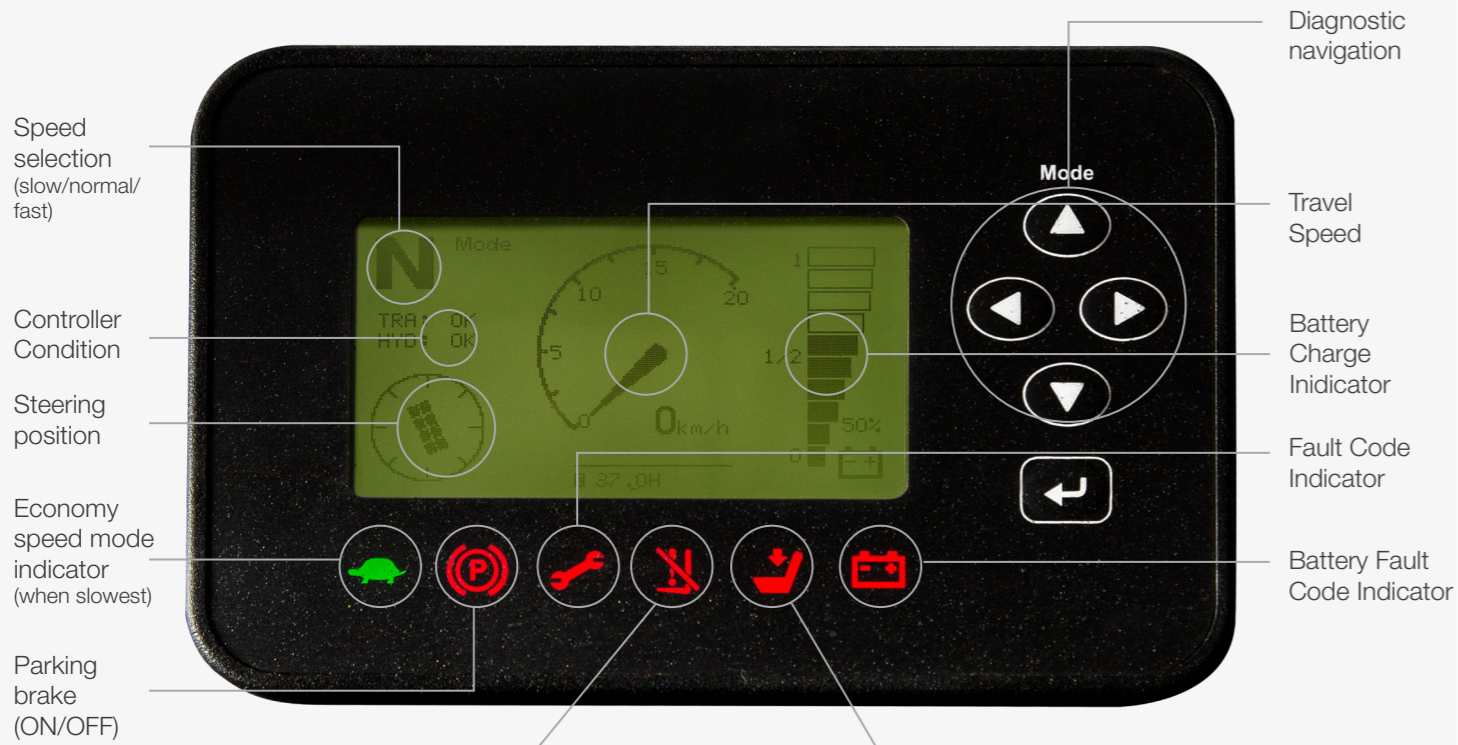
Godrej Vehicle Management System *

GVMS, our Internet of Things (IoT) uses a series of sensors on the truck to record important data and provides detailed data processing and analysis for making informed decisions

SAFE AND SECURE FOR BOTH THE OPERATOR AND BUSINESS

Interactive Display For Better Judgement

LCD Display shares vital information on speed, temperature, movement, battery life and fault codes, assisting in the diagnostics to make informed decisions.



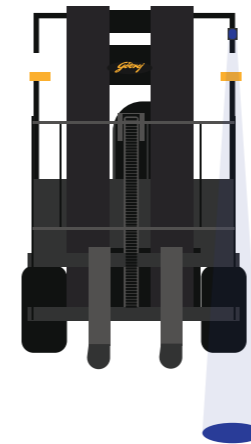
Lift Lockout For Safer Operations

Lift Lockout disables all lifting functions at 20% battery charge level provides safer operations while avoiding deep battery discharge.

No Operator No Operations

Operator presence system (OPS) detects if the driver is seated correctly before allowing the machine to start, preventing any unmanned operations.

Optional Safety Accessories



Blue Safety Light for Forward and Backward Indication

Red Halo Light for Sideward and Backward Indication



All-In-One Access Control



Smooth Lifting

Special cushioned cylinders avoid jerks while lifting and lowering operations, leading to stable operations.



No Run-aways On Slopes And Smooth Start On Inclines

Anti-roll back system stops the forklift on slopes and let it descend at a constant low speed.

Attachments

- Bale Clamp
- Battery Lifting Hook
- Coil Handling Ram
- Fork Extensions
- Fork Positioner
- Paper Roll Clamp
- Parrot Beak
- Push/Pull
- Sideshifter

Optional Accessories

Cabin Fan

USB Charging Port

Vehicle Monitoring System

Travel Alarm

Reverse spotlight

Front and Rear-View Camera

Seat Belt with Switch

Tyres – Non-marking, Cut-resistant



TECHNICAL SPECIFICATION

Title	Sr. No.	Name of parameter	Specs	Specs	Specs	
Characteristics	1.1	Manufacturer	-	Godrej	Godrej	
	1.2	Model	-	GX-160E BRAVO 3W	GX-180E BRAVO 3W GX-200E BRAVO 3W	
	1.3	Power Unit (Battery, Diesel, LPG/Petrol)	-	Battery	Battery	
	1.4	Operation (Manual, Pedestrian, Stand-on, Seated)	-	Seated	Seated	
	1.5	Load Capacity	kg	1600	1800	2000
	1.6	Load centre	c (mm)	500	500	500
	1.7	Load distance (Front overhang)	x (mm)	380	380	380
	1.8	Wheelbase	y (mm)	1408	1408	1408

Weight	2.1	Service weight incl. battery	kg	3460	3630	3630
	2.2	Axial Loading, Laden Front/Rear	kg	4410/620	4970/660	5065/565
	2.3	Axial Loading, Unladen Front/Rear	kg	1875/1555	1890/1735	1895/1735

Wheels & Chassis	3.1	Tyres (S-solid, P-pneumatic, Superelastic, Polyurethane)	-	Solid	Solid	Solid
	3.2	Tyre size, front wheel (OD x width)	mm	460x190	460x190	460x190
	3.3	Tyre size, rear wheel (OD x width)	mm	375x135	375x135	375x135
	3.4	Wheels, number front / rear (x = driven)	-	2x/2	2x/2	2x/2
	3.5	Wheel tread - Front	b10(mm)	984	984	984
	3.6	Wheel tread - Rear	b11(mm)	200	200	200

Basic Dimensions	4.1	Mast/Fork Carriage Tilt Forward/Backward α/β	α/β (deg)	5/6	5/6	5/6
	4.2	Lowered Mast Height	h1 (mm)	2135	2135	2135
	4.3	Free lift	h2 (mm)	1484	1484	1484
	4.4	Lift Height	h3 (mm)	4500	4500	4500
	4.5	Extended Mast Height	h4 (mm)	5151	5151	5151
	4.6	Overhead Load Guard (cab) Height	h6 (mm)	2130	2130	2130
	4.7	Seat Height	h7 (mm)	1133	1133	1133
	4.8	Coupling Height	h10 (mm)	530	530	530
	4.9	Overall Length	l1 (mm)	2955	2955	2955
	4.10	Length to Face of Forks	l2 (mm)	1955	1955	1955
	4.11	Overall Width	b1(mm)	1194	1194	1194
	4.12	Fork Dimensions (Thickness x Width x Length)	(mm)	40x80x1000	40x80x1000	40x80x1000
	4.13	Fork Carriage ISO 2328, Class/Type A,B	-	ISO 2A	ISO 2A	ISO 2A
	4.14	Fork Carriage Width	b3 (mm)	1041	1041	1041
	4.15	Ground clearance laden, under mast	m1 (mm)	95	95	95
	4.16	Ground clearance at center of wheelbase	m2 (mm)	105	105	105
	4.17*	Right angle aisle width (1000x1200 pallet)	Ast (mm)	3330	3330	3330
	4.18*	Aisle width for Pallets (800x1200 pallet) lengthway	mm	3455	3455	3455
	4.19*	Intersecting aisle width (1000x1200 pallet)	mm	1800	1800	1800
	4.20	Turning radius	Wa (mm)	1625	1625	1625
	4.22	Fork spread	mm	160-1040	160-1040	160-1040

Performance	5.1	Travel speed, laden/unladen	km/h	15/15	15/15	15/15
	5.2	Lift speed, laden/unladen	m/s	0.3/0.45	0.3/0.45	0.3/0.45
	5.3	Lowering speed, laden/unladen	m/s	0.45/0.4	0.45/0.4	0.45/0.4
	5.4	Drawbar pull, laden/unladen S2 60 min	N	4500/4800	4800/5100	4800/5100
	5.4	Max. Drawbar pull, laden/unladen S2 5min	N	8700/8700	9200/9200	9200/9200
	5.5	Gradient Performance, laden/unladen S2 30 min	%	15/21	15/21	15/21
	5.5	Max. Gradient Performance, laden/unladen S2 5min	%	20/23	20/23	20/23
5.6	Acceleration Time, laden/unladen	s	4.8/4.8	4.8/4.8	4.8/4.8	
5.7	Service Brake	-	Wet Disc Brake	Wet Disc Brake	Wet Disc Brake	

* includes clearance of 200mm

Electric Engine	6.1	Drive (single / Twin)	-	Twin AC	Twin AC	Twin AC
	6.2	Drive Motor (AC or DC)	-	AC	AC	AC
	6.2	Drive Motor, 60 min rating	kW	2x6.5	2x6.5	2x6.5
	6.3	Lift motor, 15 min rating	kW	15	15	15
	6.5	Battery Voltage / rated capacity (5hrs)	V/Ah	48/390	48/390	48/390
	6.6	Battery weight	kg	686	686	686
	6.7	Battery Dimension L/W/H	mm	1020x456x740	1020x456x740	1020x456x740

Other	7.1	Type of drive control	-	MOSFET	MOSFET	MOSFET
	7.2	Working pressure for attachment	bar	195	195	195

Type of Mast	Maximum Fork Height (MFH)	Overall Height Lowered (OAHL)	Overall Height Raised* (OAHR)	OAHR with Load Back Rest	Free Lift (FL)	Derated Capacity at 500mm Load Centre (kg)			Tilt Angle (degree)	
	h3 (mm)	h1 (mm)	h4 (mm)		h2 (mm)	GX 160E	GX 180E	GX 200E	Fwd. (α)	Bwd. (β)
2 STAGE CV	3660	2515	4306	4965	100	1600	1800	2000	5	6
2 STAGE CV WITH FFL	3000	2151	3581	4240	1570	1600	1800	2000	5	6
	4500	2135	5151	5810	1484	1400	1600	1700	5	6
3 STAGE CV WITH FFL	5500	2465	6147	6806	1818	1000	1150	1250	5	6
	6000	2635	6651	7310	1984	750	800	900	5	6

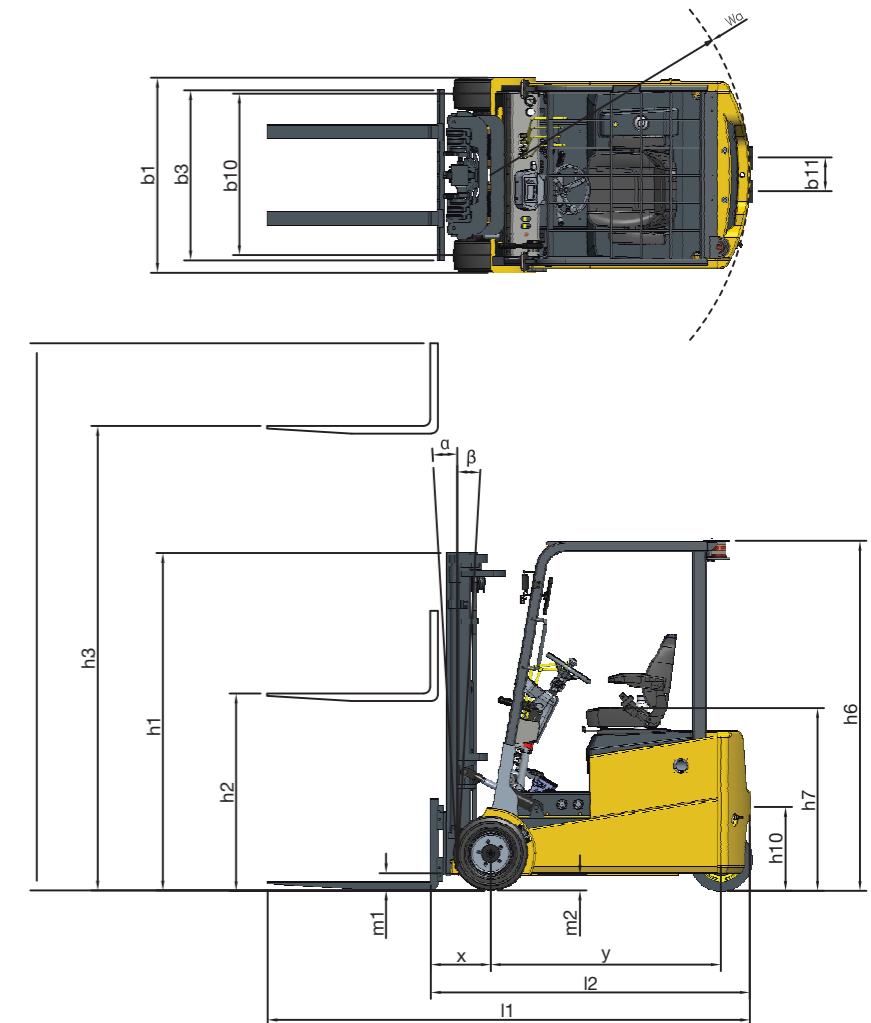
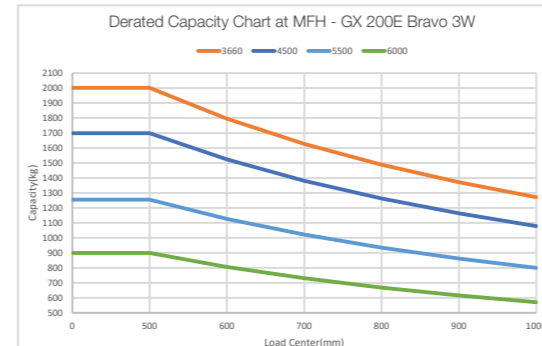
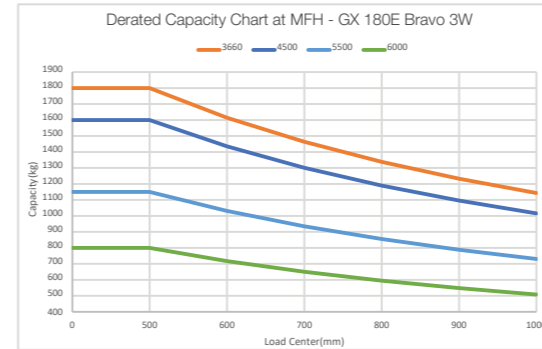
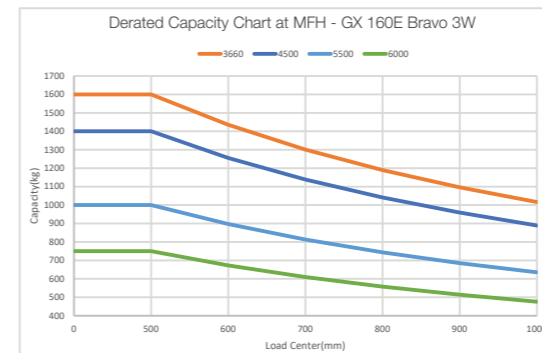
CV = Clear View

FFL = Full Free Lift

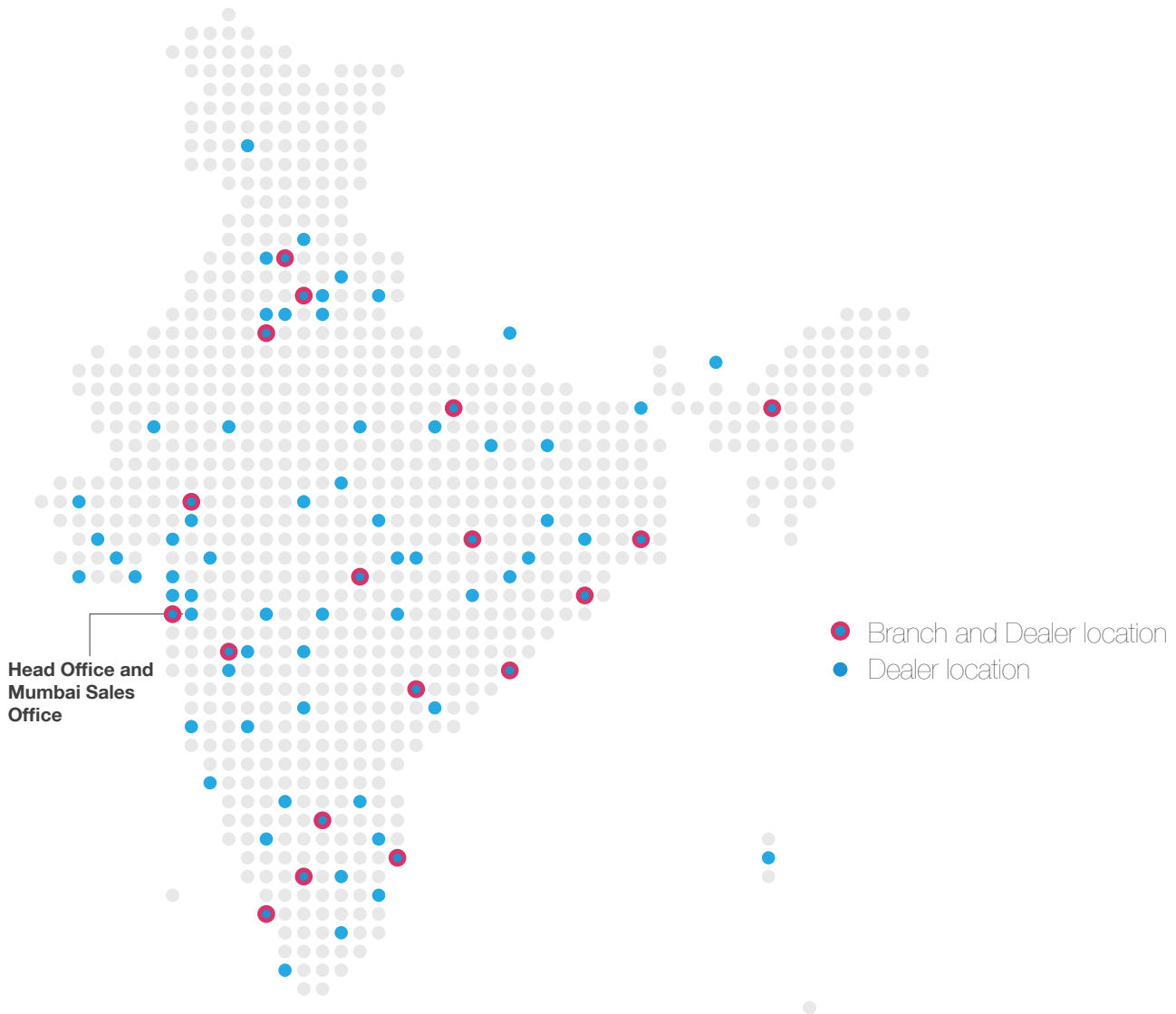
Battery option of 560Ah and 648Ah to be used for 5500 and 6000 MFH masts. (Any deviation shall be confirmed with the manufacturer)

Note : All dimensions and specifications indicated above are subjected to a variation of $\pm 10\%$

Disclaimer: These specifications are subject to change without prior notice. Please consult your local dealer/distributor for detailed specifications



SERVICE ANYTIME, ANYWHERE



VARIOUS FINANCE OPTIONS AVAILABLE

- Equipment finance
- Lease finance
- Rentals



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