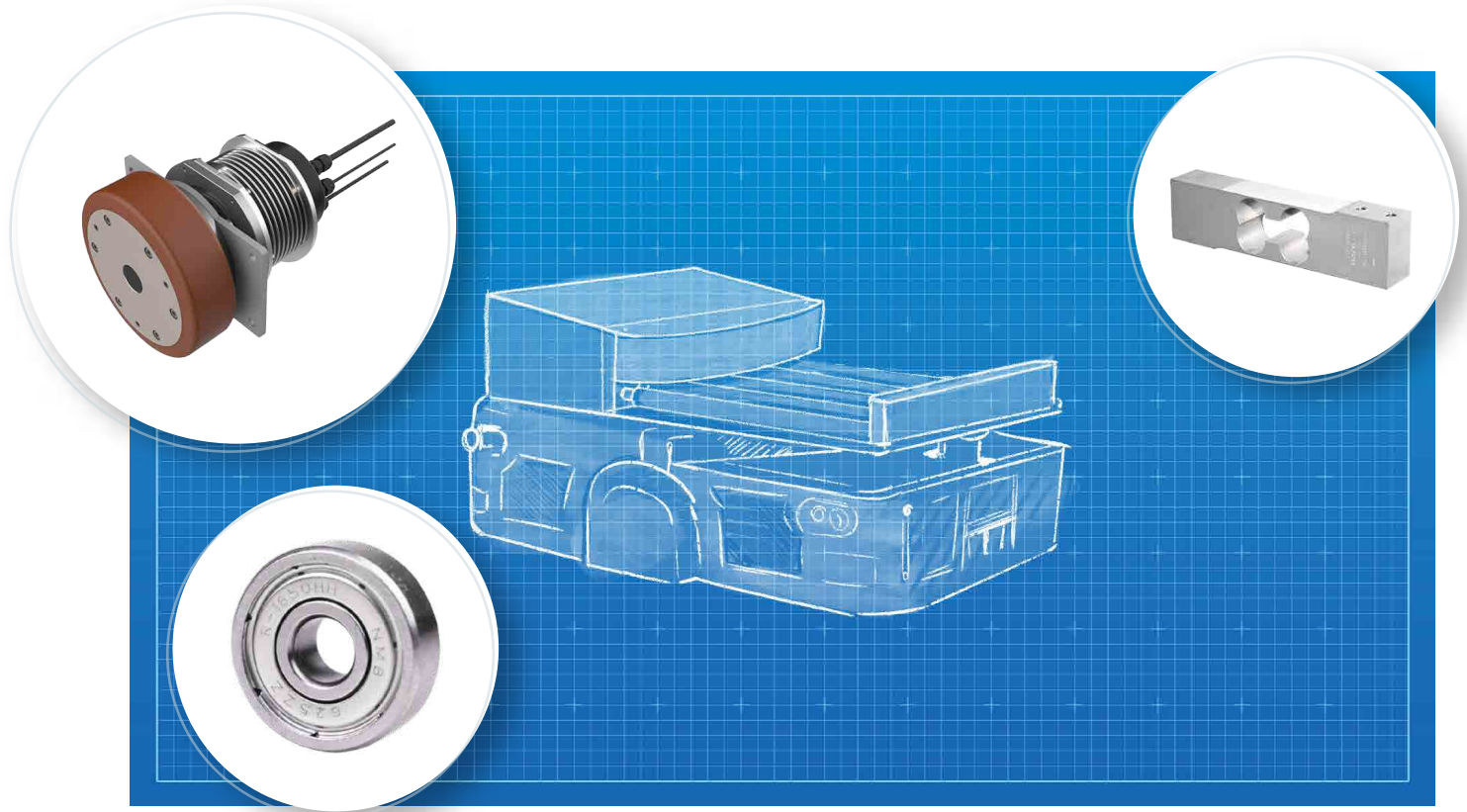


Our Products for

# AGV & AMR



**MinebeaMitsumi** delivers a robust lineup of solutions for AGV (Automated Guided Vehicle) and AMR (Autonomous Mobile Robot) applications. Our integrated BLDC Wheel Hub Motors feature a high-precision planetary gearbox, a powerful electric motor, braking system, and onboard electronics—all in one compact unit. These motors are engineered to maintain high acceleration and speed even under substantial radial loads.

For automated conveyor systems, our NMB ball bearings and hybrid stepping motors ensure smooth and accurate rotation, enhancing the efficiency of package handling. To extend operational time, we offer advanced battery protection ICs and custom AC charging solutions designed to maximize battery life.

Interested in learning more? Connect with a member of our team to explore how our technologies can support your automation goals.

# Our Products for **AGV & AMR**

Product	Function
BLDC Wheel Hub Motors	Drivetrain
Load Cell	System weight and load balance detection
Miniature Ball Bearings	Reduce friction in automated conveyors
Hybrid Motor with Optical Encoder	Bidirectional positioning for automated conveyors
Waterproof Connectors	Data and power transfer
MEMS Infrared Sensor	Safety stop feature
Li-Ion Battery Protection ICs	Optimizes battery life and performance
AC Charger	Custom design for battery charging
Spindle Unit	LIDAR sensor rotation
Precision Motor Shaft	High load rotation of wheels
IP-rated DC Fans	Rugged electronics cooling

## BLDC Wheel Hub Motors

- Robust, interchangeable PUR wheel
- Efficient 1- or 2-stage planetary gear
- Independent wheel bearing
- Universal communication interface
- High performance BLDC Motor
- Integrated holding brake
- Integrated secondary motor encoder
- Industrial standard serial interfaces (RS485/CAN)
- Primary microencoder included, SPI (internal)/SSI (external)
- Fully sealed system

