

# Transport & Logistics Solutions





# Mitsubishi Electric Transport & Logistics Solutions

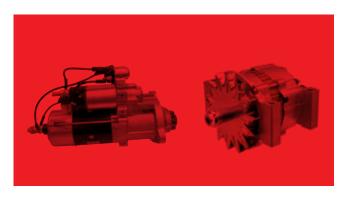
Together, we can build better.

Mitsubishi Electric supports safe, efficient and reliable transport and logistics operations with superior quality, high performance products and solutions for rail, infrastructure, critical power and heavy-duty vehicles.

We manufacture a wide range of electrical equipment and electronics which can be integrated to meet the requirements of transport and logistics owners and operators.

We're leading the world of mobility with transportation solutions centred on safety, security, comfort and advanced technology. Our industrial automation hardware and software facilitates connected, automated, digital business practices and enables optimal performance and efficiency of operations.

## **Our Products & Solutions**



# STARTER MOTORS AND ALTERNATORS



#### **Solution Overview**

Mitsubishi Electric provides superior quality and highly reliable starter motors and alternators to suit a wide range of 12 Volt and 24 Volt heavy-duty trucks operating in the toughest environments and conditions.

#### **Benefits**

Mitsubishi Electric heavy-duty starter motors are designed, engineered and built to exceed vehicle manufacturers' expectations. Our heavy-duty alternators are compact, lightweight, efficient and built to deliver superior performance.

#### **Features**

#### **Starter Motors**

- » Industry leading power-to-weight ratio, for faster starts
- » High efficiency design, to withstand extreme start stop requirements
- » Low current draw

#### **Alternators**

- » Supports up to 5-wire connection, including remote sense
- » Exceeds 100 amps at idle
- Exceeds industry requirements for heat, vibration and corrosion resistance



#### **RAIL SYSTEMS**



#### **Solution Overview**

Mitsubishi Electric supplies world leading systems for propulsion, train management and passenger information, for use in public transport applications. We have supplied equipment for transportation applications for over 50 years, including more than 4,000 electric passenger cars, light rail vehicles and locomotives, as well as components for railway substations.

#### **Benefits**

We manufacture a range of advanced technologies to enhance safety and comfort and enable effective power usage in transportation systems, from monitoring, management and control systems to traveller services and information systems. Our local engineering and technical team designs and supplies high quality, integrated and customised:

- » Traction packages
- » Auxiliary power supplies, including battery chargers
- » Train management systems
- » Passenger information systems
- » Communications packages
- » Surveillance systems
- » Remote fleet monitoring systems

#### **Features**

- » Local manufacturing 4,000m2 capacity
- » Level 3 equipment overhauls
- » System engineering and complex system coding
- » Experienced field support team for onsite repair, commissioning and troubleshooting
- » ISO 9001 certified and recognised Technically Assured Organisation (TAO) for Transport for NSW



## INDUSTRIAL AUTOMATION



#### **Solution Overview**

We invest in leading-edge development and production to optimise and strengthen industrial automation and production processes. With an extensive product line-up, integrated solutions and a global service network, we focus on continually evolving and providing high-performance, quality products that help transport and logistics operators to be more competitive and sustainable.

#### **Benefits**

We provide a full range of automation hardware including programmable controllers, servo and motion controllers, graphical operator terminals, frequency inverters, industrial robots, low/medium voltage switchgear, and energy saving supporting devices.

In addition, we provide a range of digital solutions aimed at enhancing and optimising transport and logistics operations, including a 3D simulator, data science/machine learning tools, and automation and engineering software. These solutions assist in the realisation of improved operational efficiency and effectiveness.

#### **Features**

- » Investment in world-leading R&D activities to promote the development of innovative and competitive products and technologies
- » Deployment of Security Development Lifecycle (SDL) practices to provide safe and secure solutions
- » Integration of innovative control and networking technologies to visualise information and coordinate with high-level execution systems to improve operational efficiency



#### **UPS**



#### **Solution Overview**

Adopting UPS is key to protecting IT equipment from power failures. Our range of UPS systems serve as backups for the loss of power supply and provide true online double conversion. The UPS solutions we offer are always on, providing filtered clean power supply to critical IT equipment, protecting systems that are susceptible to power harmonics and voltage fluctuation.

#### **Benefits**

Reliability is at the heart of our UPS design, and system reliability is built on high quality parts and proven system topology design.

Our UPS products achieve high efficiency by reducing power loss arising during power conversion using our proprietary insulated gate bipolar transistors (IGBT). These semiconductors achieve industry-leading levels of efficiency.

#### **Features**

- » M9950 UPS available in sizing from 120-600kVA
- » True on-line double conversion, biodirectional power converters, suitable for 100% regenerative industrial loads
- Efficiency as high as > 96%, even with loads as low as 40%
- » Only premium electrolytic capacitors and cooling fans used, together with proprietary IGBTs semiconductor, ensuring highest levels of product reliability

## **About ME & Other Solutions**

Mitsubishi Electric Australia is wholly owned by Mitsubishi Electric Corporation, Japan. A representative office of Mitsubishi Electric was opened in Australia in 1967.

MEAUST was established in 1974 as MELCO Australia Pty Ltd and became Mitsubishi Flectric Australia in 1982

We deliver solutions across Living Environments, Home Appliances, Transportation and Heavy Engineering, Automation and Controls, Automotive Equipment, Transmission and Distribution, Semiconductors and Communication Systems.

#### Other Product Solutions



- > ICONICS SCADA and Automation Software
- Building Management Systems (BMS)



- Commercial Air
  Conditioning
- » IT Cooling Equipment
- » Chillers



- Low and Medium
  Switchgear
- Energy SavingSupporting Devices



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