

# Two/ Three-Wheeler Solutions

Efficient electric two/ three-wheeler solutions

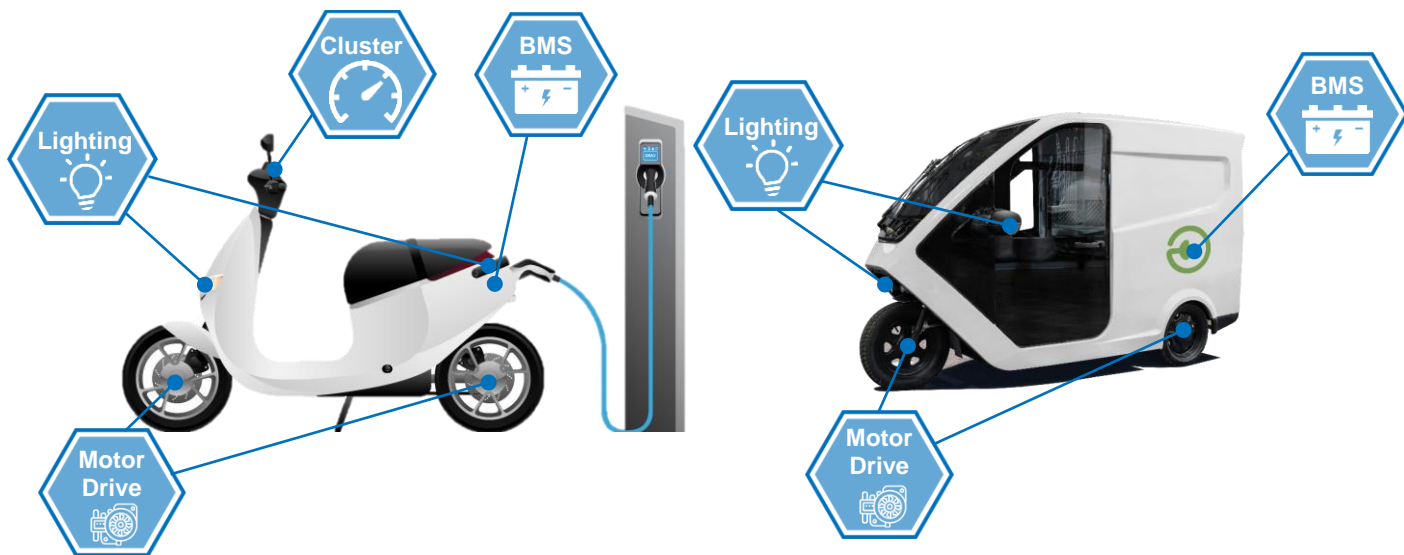


The use of two-wheeled and three-wheeled electric vehicles in urban transportation helps reduce noise pollution. Internal combustion engine vehicles usually generate noise, whereas electric vehicles are comparatively quieter. This contributes to improving the urban environment, reducing disturbances caused by noise for residents, and providing a more serene driving experience.

Power semiconductors are key components that control the flow and conversion of electrical power in electric vehicles. PANJIT provides a variety of power semiconductor components for two and three-wheelers, such as power MOSFETs, IGBTs, power diodes, and more. These components are used in critical circuits like electric motor drivers, battery management systems, and charging systems for electric vehicles.

The high efficiency and high power density of power semiconductor devices enable electric vehicles to achieve higher performance and longer range. These devices need to withstand high currents and temperatures while having low switching losses and conduction losses, providing efficient energy conversion and excellent control characteristics.

## ➤ PANJIT's Electric Two-Wheeler/ Three-Wheeler Solutions



## ➤ Recommended Products

Application	Product Category	Product ID/ Series	Key Specification	Package
<b>BMS</b>				
Battery/ Aux Output/ Charger	TVS	P4SMAJ54A-AU ~ P4SMAJ75CA-AU Series	400W/ 54-75V/ Unidirectional or Bidirectional	SMA
		P6SMBJ54A-AU ~ P6SMBJ75CA-AU Series	600W/ 54-75V/ Unidirectional or Bidirectional	SMB
		P6AFC33A-AU~P6AFC64A-AU Series	600W/ 54-75V	SMAF-C
		P4FL5.0A-AU	400W/ 5V Ultra Low I <sub>R</sub>	SOD-123FL
	ESD	PEC3824C2A-AU	24V/±30KV/ Bidirectional	SOT-23
		PEC3824C2C-AU	24V/±30KV/ Bidirectional	SOT-323
		PEC3815C2E-AU	15V/±30KV/ Bidirectional	SOT-523
	Zener	PZS515V6BCH-AU	500mW/ 5.6V/ Ultra Low I <sub>R</sub>	SOD-323HE
		PZS515V6BAS-AU	500mW/ 5.6V/ Ultra Low I <sub>R</sub>	SOD-123
PZS5112BCH-AU		500mW/ 12V/ Ultra Low I <sub>R</sub>	SOD-323HE	
Battery Disconnect Unit	TVS	SM8S22A-AU~ SM8S36A-AU Series	22V-36V/ 6600W	DO-218AB
		1.5SMC-AU Series	22V-36V/ 1500W	SMC
<b>Motor Drive</b>				
DC Input Protection/ Auxiliary Power/ I/O Communication Interface	TVS	P6SMBJ24CA-AU ~ P6SMBJ36CA-AU Series	600W/24V/28V/33V/36V/ Bidirectional	SMB
	ESD	PEC3815C2A-AU ~ PEC3824C2A-AU Series	24V/15V/±30KV/ Single Channel/ LIN Bidirectional	SOD-323
		PEC3824C2C-AU	24V/±30KV/ Dual Channel/ CAN Bidirectional	SOT-323
	General Rectifier	GS1004FL-AU	400V/ 1A	SOD-123FL
	Schottky	MBR5H60PC-AU	60V/ 5A	TO-277C
		MBR8H120PC-AU	120V, 8A	TO-277C
		MBR5H150PC-AU	150V, 5A	TO-277C
SS30100HE-AU		100V, 3A	SOD-123HE	
Power Bridge	MOSFET	PSMP050N10NS2*	100V/ N-Channel/ R <sub>DS(ON)</sub> Max., <4.3mΩ (V <sub>GS</sub> @10V)	TO-220AB-L
		PSMP032N08NS1	80V/ N-Channel/ R <sub>DS(ON)</sub> Max., <3.4mΩ (V <sub>GS</sub> @10V)	TO-220AB-L

\* Under development