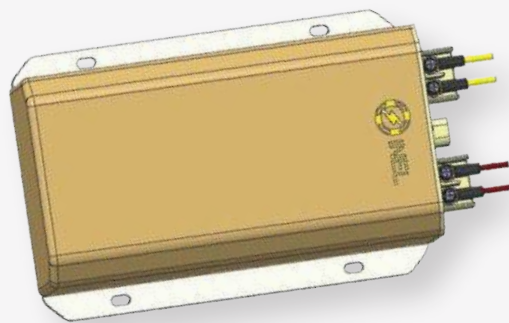




# DC DC Converter

( Isolated )



## Product Outline

A DC-DC isolated converter transforms DC voltage levels while electrically isolating the input from the output, ensuring safety and preventing interference. Widely used in industrial, automotive, and renewable energy systems, it delivers efficient and reliable power transfer in demanding environments.

## Specifications

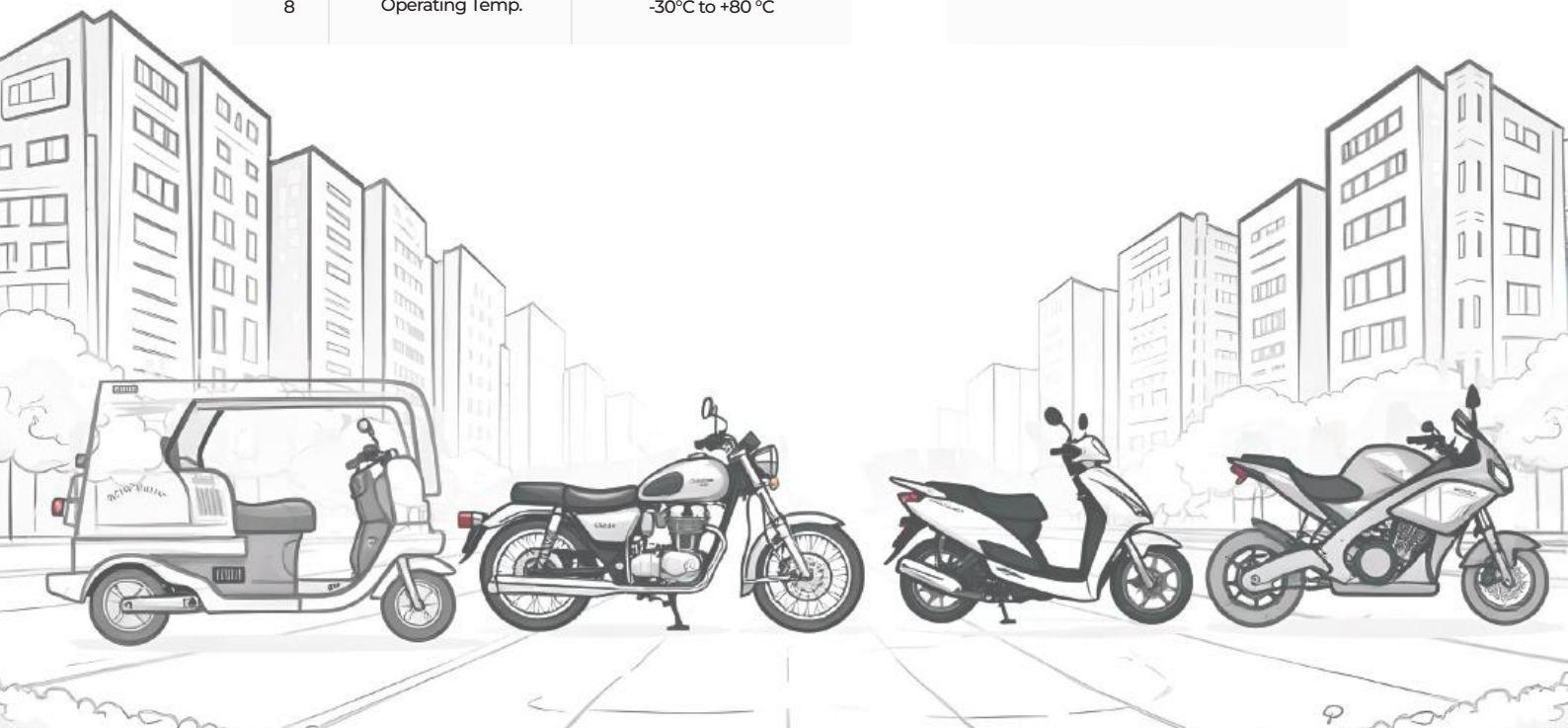
Sl. No	Specification	Buck
1	Type	Isolated
2	Input Voltage Range	70V to 150V
3	Output Voltage	12V, 14V (Tolerance : $\pm 0.5V$ )
4	Output Current	10A / 25A
5	Ripple voltage	< 1% of rated voltage
6	Voltage regulation	< 2% of rated voltage
7	Efficiency	> 90%
8	Operating Temp.	-30°C to +80 °C

## Application

### EV 2 Wheeler / 3 Wheeler

#### Features

- ✓ The over current and short circuit protection.
- ✓ Input Over voltage and under voltage protection
- ✓ Transient voltage and thermal protection
- ✓ Reverse voltage protection with battery input
- ✓ IP67 rated





# LED Digital Instrument Cluster



## Product Outline

The LED Digital Instrument Cluster is a compact, energy-efficient display that provides essential ride data such as speed, odometer, and battery status. Its vivid LED interface ensures high visibility in all lighting conditions, including bright sunlight. Designed for durability and quick response, it integrates seamlessly with vehicle controls for a modern riding experience.

## General Specifications

Sl. No	Parameters	Required Specification
1	Rated Voltage	12V DC
2	Operating Voltage Range	8 to 18 V DC
3	Operating Temperature	-30°C to +85°C
4	Storage Temperature	-40°C to +90°C
5	LCD type	Segmental type -TN Positive
6	Speedo range	0-199 Km/h
7	CAN communication	Yes

## Features

### Basic Features

- ✓ Speedometer through LED's
- ✓ Fuel Bar graph in LCD
- ✓ Odometer in LCD
- ✓ LED warning indicators

### Add on features

- ✓ Speedo segment color change based on vehicle speed. (Normal- Amber, Economy- Green and High - Red)
- ✓ Blue tooth for TPMS, Vehicle management through
- ✓ Integration through mobile.
- ✓ Tilt sensor
- ✓ Ambient light sensor for brightness control
- ✓ Buzzer for high speed.
- ✓ Logo display in LCD.

	Speedo meter representation during vehicle off condition	Speedo meter when vehicle is in normal speed mode	Speedo meter when vehicle is in Economy mode	Speedo meter when vehicle is in high speed mode
Vehicle speed	Switch off condition	Example 0-30 Km/hr & 51-80 Km/hr	Example 31-50 Km/hr	Example 81-199 Km/hr
Artwork representation				