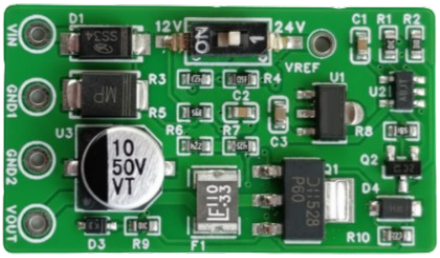
Accessory device

LVD Ultra Low-Power

The LVD (Low Voltage Disconnect) module is a battery protector designed for vehicle telemetry equipment. It automatically disconnects the load when voltage drops below a safe threshold, preventing the deep discharges that could damage the battery or leave the engine unable to start.

Ideal for vehicle tracking systems, telemetry, automotive IoT and commercial fleet monitoring.



Main Features

- ✓ **Ultra-low consumption**:
  < 10 µA in standby
- ✓ **Dual mode**:
  12V / 24V switch-selectable
- ✓ **Low voltage drop**:
  design optimized for minimum loss
- ✓ **Built-in hysteresis**:
  prevents oscillation at the cut-off point
- ✓ **Full protection**:
  overvoltage, overcurrent
  and reverse polarity

Applications

GPS/GNSS equipment for vehicle tracking

Telemetry systems and remote monitoring

IoT devices powered by battery

Commercial fleets and heavy machinery

Built-in Protections

- ✓ Overvoltage: TVS protection
- ✓ Overcurrent: resettable fuse
- ✓ Reverse polarity: input protection

Electrical Specifications

- **Power supply**: 9 VDC to 36 VDC
- **Standby consumption**: < 10 µA typical
- **Maximum current**: 1 A continuous
- **Overvoltage protection**: clamp at 36 V

Operating Thresholds

Mode	Cut-off (typical)	Reconnection (typical)
12V	~12 V	~12.5 V
24V	~23.5 V	~24.5 V
Thresholds include hysteresis for stable operation.		

Environmental Conditions

- **Operating temperature**: –40 °C to +85 °C
- **Relative humidity**: 5% to 95% non-condensing

Mechanical Specifications

- **Format**: compact SMD PCB
- **Dimensions**: ~35 × 20 mm
- **Weight**: < 5 g

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