



Sensors



Switches



Controls

Application notes



Application Note : September 2021

Market involved : Mobile equipment

Product : ICS E1 inductive sensors

Customer : Manufacturers of mobile cranes

Subject : Reliable operation in any battery conditions such as voltage deviations on onboard power supply

CUSTOMER ISSUE :

Mobile cranes, like other mobile equipment, are battery operated and need to operate even when their batteries are being stressed.

Supply voltage is generally affected by very high fluctuations: from voltage sags when the battery is discharged, to increased voltage during battery charging, and to voltage peaks when switching high electrical loads, such as pumps or motors.

In these situations, sensors with standard supply voltage, typically from 12 to 30 VDC, would stop working or operate unreliably, causing downtime.

OUR SOLUTION :

To allow reliable operation in mobile equipment applications, the ICS E1 sensors have been designed with an extended supply voltage range from 8 to 60 VDC, granting a safe and continuous operation in any battery condition.

BENEFITS :

- Reliable operation in any battery condition thanks to the wide operating voltage range from 8 to 60 VDC
- Increased vehicle uptime