

#### **CUSTOMER STORIES**

# eVTOL APPLICATIONS DEMAND UTMOST PERFORMANCE IN A RELIABLE, LIGHTWEIGHT, AND COMPACT FOOTPRINT



Cell Cycle Life: eVTOL Aircraft

Our sensing solutions provide exceptional flexibility in capturing essential information for pioneers in next-gen aviation solutions

## CHALLENGE

Many innovators in eVTOL aircraft are in a demanding "proof-of-concept" phase in their company's lifecycle. With prototypes ready, these engineering teams are busy turning great designs into viable commercial-scale products. This requires versatile, intelligent sensing components that offer uncompromising performance in demanding physical environments—without adding much weight.

#### SOLUTION

The Isabellenhütte team is working with several innovators to achieve the technical and commercial objectives of their battery/power systems. Smart sensing solutions such as our IPC-CII, IVT-S and ICD-A products have been incorporated into eVTOL aircraft to deliver programable, high current and voltage sensing capabilities. IVT-S offers a current measurement range of up to 2,500 A and a voltage measurement of up to 1,000 V. Using a CANbus 2.0 interface, additional functions can be implemented, such as the temperature measurement of the busbars, overcurrent detection and other performance data. IPC-CII is a fully calibrated phase current sensor that offers high precision and low offset in a compact and lightweight shunt-based design. ICD-A is a compact, shunt based solution offering 12V-48V current sensing.

## APPLICATION

eVTOL aircraft designed to perform a variety of missions including: commercial and private sector transportation (personnel), logistics/cargo, defense, and emergency response services