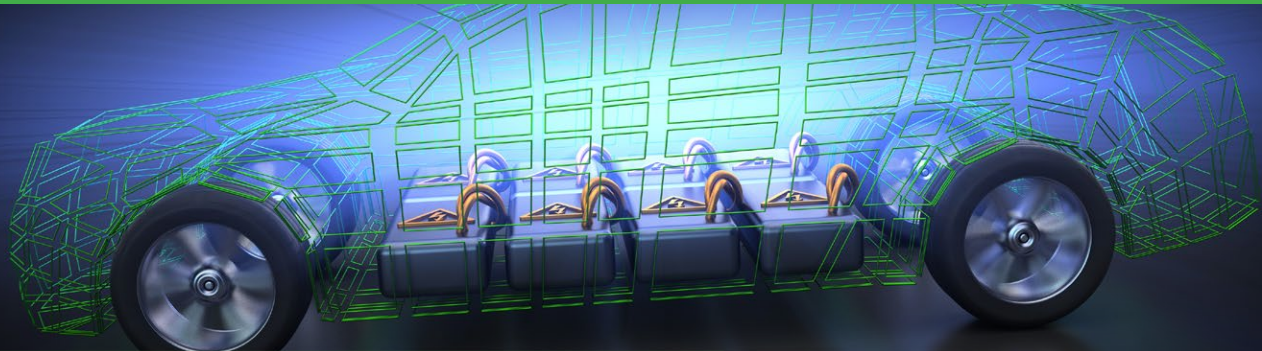




## SOLUTIONS FOR BATTERY MANAGEMENT SYSTEMS (BMS)



## INTRODUCTION

Isabellenhütte components have powered pioneering breakthroughs in shunt technology since their introduction in 1987. In addition to in-house R&D and a 500-year tradition of producing precision resistance alloys, our long experience guarantees the highest accuracy and flexibility in the development and production of surface-mounted devices and BMS shunts.

We supply excellent products for high-precision current measurement—particularly suited to the requirements of BMS applications within the automotive industry. We continue to lead the industry in quality—a critical factor as vehicle manufacturers seek to improve the range and performance of their EVs, and other industries continue to evolve.

## OFF-THE-SHELF &amp; CUSTOMIZED SOLUTIONS

## Standard Busbar Shunt Portfolio

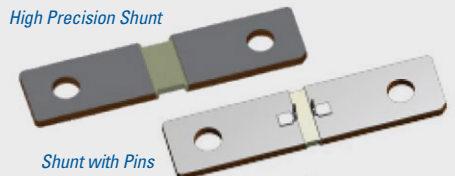
	BAS	BAX	KVM	BVE
Size in mm	84 x 20	84 x 36	35 x 15.5	15 x 7.75
Power rating in W	36	50	10	10
TCR in ppm/K (20°C-60°C)	50	50	50	50
Continuous current in A	925	1500	315	315

## OPTIONS

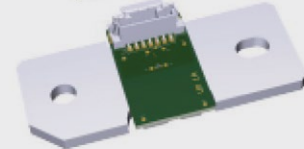
Pins / pressed in or welded	x	x	x	
PCBA	x	x	x	
200µohm	x			x
100µohm	x		x	x
50µohm	x		x	
35µohm	x			
20µohm		x		
5µohm		x		

## Available Integration Levels

High Precision Shunt



Shunt with Pins

Shunt with PCBA  
(connector = NTC)Shunt with enhanced functionality  
(ASIL - D applications)

We offer a standard BMS shunt portfolio as well as provide tailor-made shunts for customer-specific project requirements. Clients are guided through the entire process to design a shunt perfectly suited for their BMS applications.

## All of the following parameters may be customized:

- Resistance values and tolerances
- Geometry and dimensions — length, width, thickness, hole placements, etc.
- Surface plating — tin, nickel, partial tinning, etc.
- TCR optimization, data matrix code on shunt with TCR curve
- Sensor connections e.g. pins, PCB with connector, etc.
- Current connection, bolts, threaded posts, etc.

## Expect more from Isabellenhütte

Packing more electronics into every vehicle is a daily challenge. Whether you need to drive performance in traditional vehicles or push the boundaries of electrification for all types of vehicles, Isabellenhütte helps you do more—in less space too! We combine 500 years of metallurgical excellence with next-gen engineering. "EXPECT MORE" from us at every turn & see how better quality & precision can take your projects further.

