

Group Convergence Hall Sensor | OM-BOD-B102D



The OM-BOD-B102D is a Hall effect current sensor designed for online battery monitoring, featuring a $\pm 600\text{A}$ measurement range and group convergence functionality. It integrates seamlessly with DC voltage transmitters and individual battery acquisition modules for complete battery bank supervision. The sensor converges data from connected battery modules and voltage transmitters, providing comprehensive battery group parameters and module settings via a northbound Modbus RTU interface for rapid integration with third-party monitoring systems. Utilizing SNS bus communication on the OUT port, it supports mixed daisy-chain connections with up to 64 battery acquisition modules and one DC voltage transmitter per channel. Installation is simple with the open-loop split-core design—simply clamp around the conductor following the directional marking.

Specifications

Power Supply (IN Port)

Connector Type	RJ45
Operating Voltage	9 ~ 16V DC
Operating Current	$\leq 100\text{mA}$ @ 12V DC
Overcurrent/Overvoltage Protection	18V / 200mA
Surge Protection	600W
Protection Method	PPTC + TVS

RS485 (IN Port)

Connector Type	RJ45
Baud Rate	1200 ~ 115200 bps
Transmission Distance	1200 meters
Overcurrent/Overvoltage Protection	18V / 200mA

Measurement Parameters

Current Range	$\pm 600\text{A}$ DC
Current Accuracy	$\pm 1\%$ (FS)

Operating Environment

Temperature	-40°C ~ 85°C
Humidity	5% ~ 95% (non-condensing)

SNS Bus Port

Communication Distance	50 meters
Connector Type	RJ45
Baud Rate	4800 bps
Overcurrent/Overvoltage Protection	18V / 200mA

Physical Specifications

Insulation Strength	1500V
Dimensions (L × W × H)	78 mm × 16.3 mm × 84 mm