# SENSOR Module CHB-100S

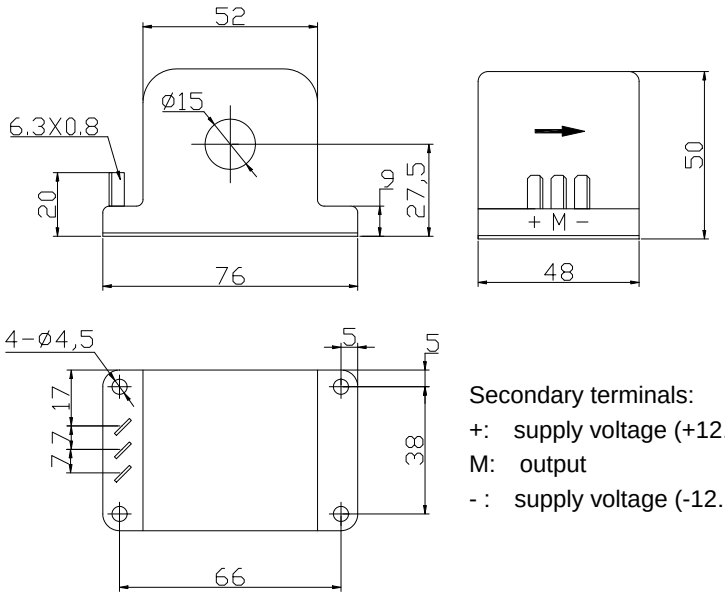
$I_N$ = 100A

## Specifications:

Closed loop Hall current sensor, Nominal current 100A RMS for measuring of currents: AC, DC, pulsed…

| | | | |
|---|---|---|---|
| | Type | CHB-100S | |
| $I_N$ | Nominal current (RMS) | 100A | |
| $I_P$ | Measuring range ($I_{P-P}$) | 0…±200A | |
| $R_M$ | Measuring resistance | $R_M$ min | $R_M$ max |
| | （Vc =±12V） | 0Ω (at 100A or 200A) | 75Ω (at 100A); 25Ω (at 200A) |
| | （Vc =±18V） | 30Ω (at 100A or 200A) | 135Ω (at 100A); 55Ω (at200A) |
| $I_M$ | Output current | Nominal output current 100mA, for primary nominal current $I_N$ =100A | |
| X | Accuracy (Ta =+25℃) | $I_N$±0.8% | |
| $K_N$ | Turns ratio | 1:1000 | |
| Vc | Supply voltage | ±12…18V (±5%) | |
| Vi | Isolation voltage | Between primary and secondary circuit: 6KV RMS/50Hz/1min. | |
| Ioff | Offset current (Ta =+25℃) | ±0.3mA max, for primary current $I_N$=0 | |
| Td | Temperature drift | $I_M$ of 0.02%/℃ (-25℃…+85℃) | |
| L | Linearity | < 0.1% | |
| Tr | Response time | < 1μS | |
| | di/dt | > 50A/μS | |
| f | Frequency bandwidth | 0…100KHz | |
| Ta | Operating temperature | -25℃…+85℃ | |
| Ts | Storage temperature | -40℃…+90℃ | |
| Ic | Current consumption | 28mA+$I_M$ (Output current) | |
| Rs | Secondary resistance | 25Ω（Ta =+70℃） | |
| $R_N$ | Primary resistance | ----- | |
| W | Weight | 150g | |

## Dimensions (mm):



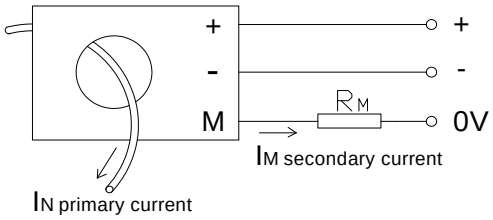

Secondary terminals:

+: supply voltage (+12…18V)

M: output

- : supply voltage (-12…18V)

## Connection:





Output $I_M$ is positive, when the primary current flows in the direction of the arrow.

**SENSOR Module** is a Hall current sensor for the electronic measurement of current with a galvanic isolation between the primary and secondary circuits.

By WeChat for more information→


**北京森社电子有限公司** Beijing SENSOR Electronics Co., Ltd. e-mail: sales@bjsse.com.cn tel.: 010-51667721, 85367366 Ver. 21.01 **www.bjsse.com.cn**

No.7 Shuang Qiao West, Chao Yang District, Beijing, China （100121）

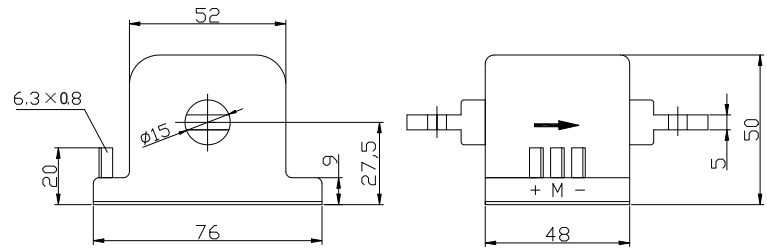
# SENSOR Module CHB-100T

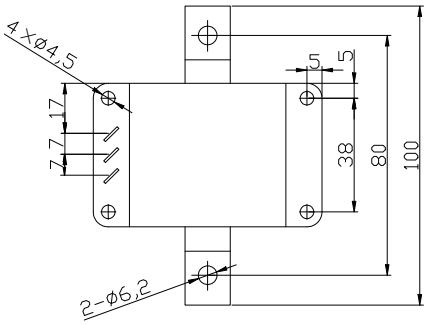
$I_N$ = 100A

**Specifications:** Closed loop Hall current sensor, Nominal current 100A RMS for measuring of currents: AC, DC, pulsed…

| | | | |
|---|---|---|---|
| | Type | CHB-100T | |
| $I_N$ | Nominal current (RMS) | 100A | |
| $I_P$ | Measuring range ($I_{P-P}$) | 0…±200A | |
| $R_M$ | Measuring resistance | $R_M$ min | $R_M$ max |
| | （Vc =±12V） | 0Ω (at 100A or 200A) | 75Ω (at 100A); 25Ω (at 200A) |
| | （Vc =±18V） | 30Ω (at 100A or 200A) | 135Ω (at 100A); 55Ω (at200A) |
| $I_M$ | Output current | Nominal output current 100mA, for primary nominal current $I_N$ =100A | |
| X | Accuracy (Ta =+25℃) | $I_N$±0.8% | |
| $K_N$ | Turns ratio | 1:1000 | |
| Vc | Supply voltage | ±12…18V (±5%) | |
| Vi | Isolation voltage | Between primary and secondary circuit: 6KV RMS/50Hz/1min. | |
| Ioff | Offset current (Ta =+25℃) | ±0.3mA max, for primary current $I_N$=0 | |
| Td | Temperature drift | $I_M$ of 0.02%/℃ (-25℃…+85℃) | |
| L | Linearity | < 0.1% | |
| Tr | Response time | < 1μS | |
| | di/dt | > 50A/μS | |
| f | Frequency bandwidth | 0…100KHz | |
| Ta | Operating temperature | -25℃…+85℃ | |
| Ts | Storage temperature | -40℃…+90℃ | |
| Ic | Current consumption | 28mA+$I_M$ (Output current) | |
| Rs | Secondary resistance | 25Ω（Ta =+70℃） | |
| $R_N$ | Primary resistance | ----- | |
| W | Weight | 270g | |

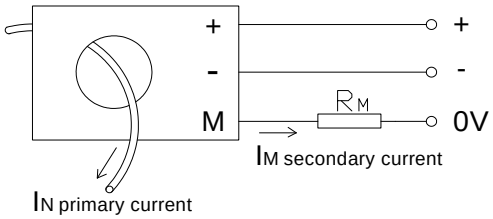
## Dimensions (mm):




Secondary terminals:
+: supply voltage (+12…18V)
M: output
- : supply voltage (-12…18V)

## Connection:





Output $I_M$ is positive, when the primary current flows in the direction of the arrow.

**SENSOR Module** is a Hall current sensor for the electronic measurement of current with a galvanic isolation between the primary and secondary circuits

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