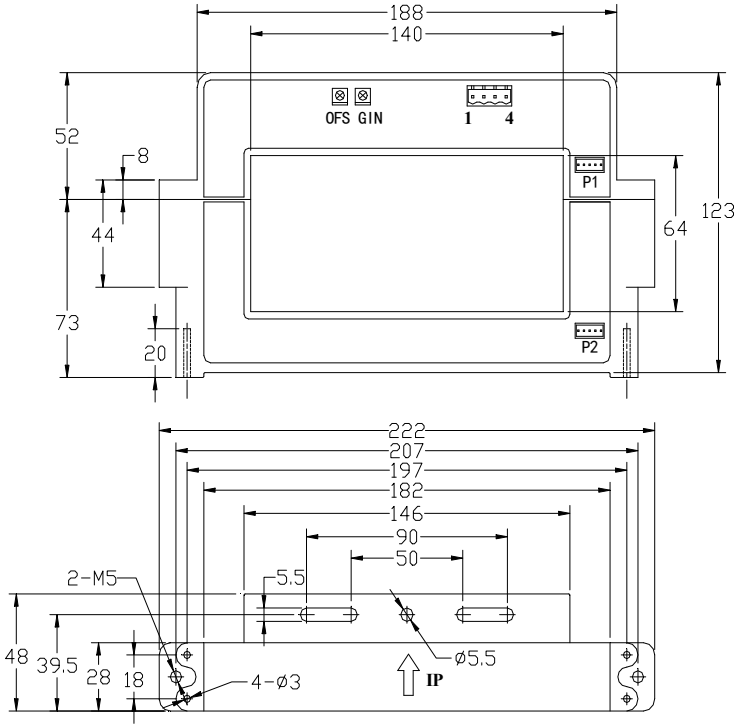
# CS10000KD
# Hall-effect Current Sensor Series

Open loop current sensor based on the principle of Hall-effect. It can be used for measuring AC,DC,pulsed and mixed current.

## Electrical characteristics

| | Type | CS500KD | CS2500KD | CS5000KD | CS8000KD | CS10000KD | |
|---|---|---|---|---|---|---|---|
| $I_{PN}$ | Primary nominal input current | 500 | 2500 | 5000 | 8000 | 10000 | A |
| $I_P$ | Measuring range of primary current | 0~±1000 | 0~±3000 | 0~±10000 | 0~±12000 | 0~±12000 | A |
| $V_{OUT}$ | Nominal output voltage | 4±1% | | | | | V |
| $V_C$ | Supply voltage | ±12~±15(±5%) | | | | | V |
| $I_C$ | Current consumption | $V_C$=±15V | | <50 | | | mA |
| $V_D$ | Insulation voltage | AC/50Hz/1min | | 6 | | | kV |
| $\varepsilon_L$ | Linearity | <1 | | | | | %FS |
| $V_O$ | Offset voltage | $T_A$=25℃ | | <±25 | | | mV |
| $V_{OM}$ | Residual voltage | $I_{PN}$→0 | | <±20 | | | mV |
| $V_{OT}$ | Thermal drift of $V_0$ | $I_P$=0 $T_A$=–25~+85℃ | | <±1 | | | mV/℃ |
| $T_R$ | Response time | ≤10 | | | | | μs |
| f | Frequency bandwidth(-3dB) | DC~6 | | | | | kHz |
| $T_A$ | Ambient operating temperature | –25~+85 | | | | | ℃ |
| $T_S$ | Ambient storage temperature | –25~+100 | | | | | ℃ |
| $R_L$ | Load resistance | ≥10 | | | | | KΩ |
| m | Mass | 1350 | | | | | g |
| | Standard | Q/320115QHKJ-2016 | | | | | |

## Dimensions of drawing (mm)




Elucidation: 1:+15V 2:–15V 3: $V_{OUT}$ 4:0V(GND) OFS:Zero adjustment GIN:Gain adjustment

## Remarks

·Incorrect connection may lead to the damage of the sensor.

·$V_{OUT}$ is positive when the $I_P$ flows in the direction of the arrow.