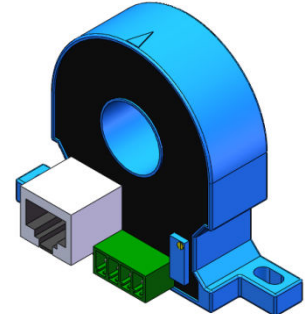


# DC Leakage Current Sensor

## SCD10



### Product description

#### Features

- SCD series DC leakage current sensor, using the principle of magnetic modulation closed-loop, for isolated measurement of DC milliampere small current.
- The isolation voltage between primary and secondary is greater than 3000VAC.
- Temperature compensation circuit control, zero drift, accurate measurement.
- Perforated input, unplugging terminals, screw fastening flat mounting.
- Overall size(mm): 72(L)×18(W)×60(H); Aperture: 18mm
- Comply with UL94-V0 flame retardant rating.
- Switching input, RJ45 standard interface output

#### Applications

- Widely used in emerging industries and fields such as electric power, industrial automation, solar photovoltaic, etc.

#### Implementation standards

- GB/T 7665-2005
- JB/T 25480-2010
- JB/T 11205-2011
- SJ 20790-2000

#### Certifications:



## Technical Parameters

Model Parameters (25°C)	SCD10-				
	10mA	20mA	50mA	100mA	1A
Primary Current $I_{PN}$ (DC)	10mA	20mA	50mA	100mA	1A
Primary Current Max. Peak Value $I_{PM}$ (DC)	±12mA	±24mA	±60mA	±120mA	±1.2A
Output voltage $V_{out}$ @ ± $I_{PN}$ , $R_L=10K\Omega$	±5V±1%				

## Electrical Data

Item	Min.	Max.	Typical	Unit
Input power supply voltage range $V_C$ (±5%) (Remark 1)	±11	±12	±18	$V_{DC}$
Current consumption $I_C$	-	±10	-	mA
Withstand resistance $R_{INS}$ @500V DC	1000	-	-	$M\Omega$
Output voltage $V_{out}$ @ $I_{PN}$ , $R_L=10K\Omega$ , $T_A=25^\circ C$	4.950	5.000	5.050	V
Output internal resistance $R_{OUT}$	-	100	-	$\Omega$
Load Resistance $R_L$	-	10	-	$K\Omega$
Accuracy X @ $I_{PN}$ , $T_A=25^\circ C$	-	±1	-	%
Linearity $\epsilon_L$ @ $R_L=10K\Omega$ , $T_A=25^\circ C$	-	±0.5	-	%
Offset voltage $V_{OE}$ @ $T_A=25^\circ C$	-	±50	-	mV
Temperature coefficient of offset voltage $TCV_{OE}$	-	±1	±2	mV/°C
Response Time $t_D$ @ $0 \rightarrow I_{PN}$	-	500	900	ms
Operating ambient temperature range $T_A$	-10	25	75	°C
Storage ambient temperature range $T_s$	-25	25	85	°C
Insulation withstand voltage $V_D$ @50Hz, 60s, 0.1mA		3000		$V_{AC}$
Weight m		70		g

Remark:

Shenzhen SoCan Technologies Co.,Ltd

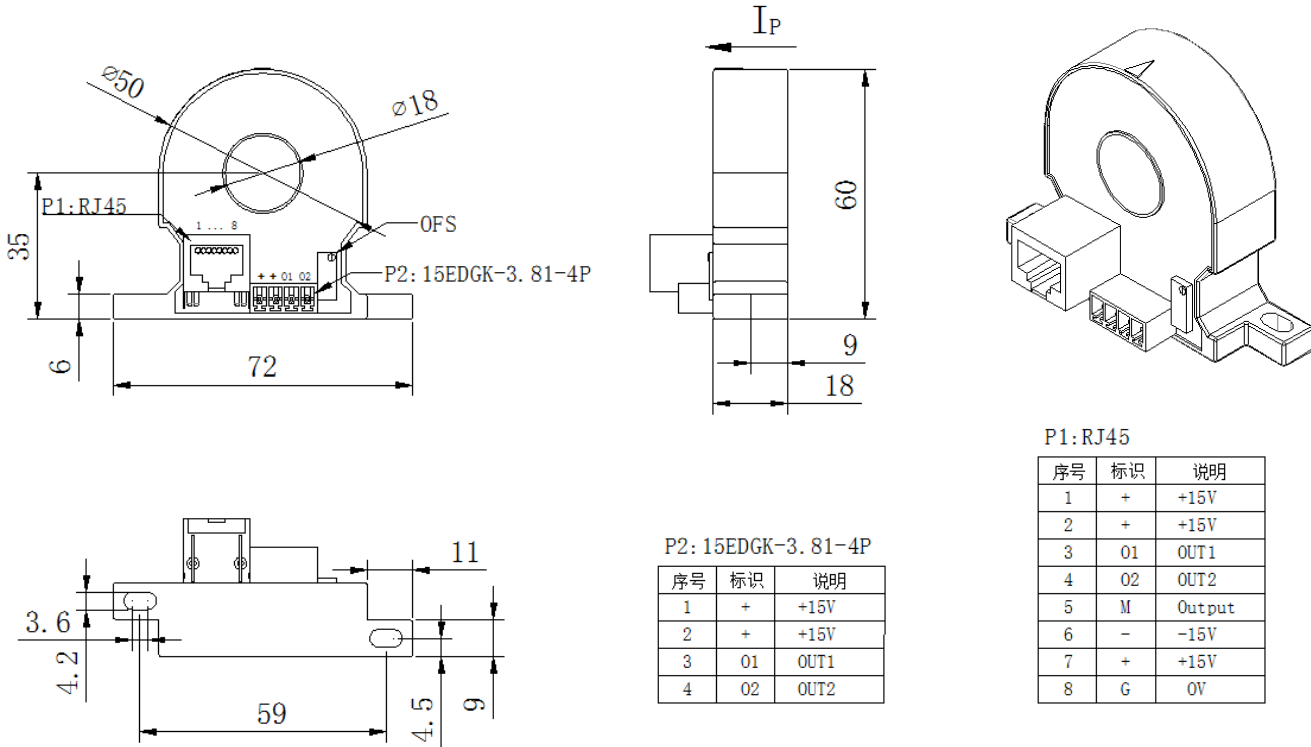
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1. If VC is less than the minimum value, the measurement will be inaccurate. If VC is greater than the maximum value, it may cause permanent failure of the measuring device.

$$2. V_{OUT} = 5.05 * \frac{R_L}{100 + R_L} * \frac{I_P}{I_{PN}} + V_{OE}$$

### Dimensions (in mm)



P2: 15EDGK-3. 81-4P

序号	标识	说明
1	+	+15V
2	+	+15V
3	01	OUT1
4	02	OUT2

P1:RJ45

序号	标识	说明
1	+	+15V
2	+	+15V
3	01	OUT1
4	02	OUT2
5	M	Output
6	-	-15V
7	+	+15V
8	G	0V

#### Notes:

1. Size error:  $\pm 0.5$ mm;
2. Primary aperture:  $\phi 18$ mm;
3. Fastening hole:  $\phi 4.2 \times 3.6$ mm\*2;
4. Switching output terminal: 15EDGK-3.81-4P,  
Signal output terminal: RJ45 network port;
5. The  $I_P$  indication direction is the positive direction of the current, and the OFS is the zero adjustment;
6. Incorrect wiring may cause damage to the sensor;
7. The zero voltage of the sensor can be adjusted appropriately according to the needs of users;