

$I_{PN} = 200 \dots 2000A, V_{out} = \pm 4V$

**Features**

- ◆ Hall effect measuring principle
- ◆ Galvanic isolation between primary and secondary circuit
- ◆ Low power consumption
- ◆ Extended measuring range
- ◆ Isolation voltage 3000V

**Advantages**

- ◆ Easy installation
- ◆ Small size and space saving
- ◆ Only one design for wide current ratings range
- ◆ High immunity to external interference

**Industrial applications**

- ◆ DC motor drives
- ◆ Switched Mode Power Supplies(SMPS)
- ◆ AC variable speed drives
- ◆ Uninterruptible Power Supplies(UPS)
- ◆ Battery supplied applications
- ◆ Power supplies for welding application

<b>TYPES OF PRODUCTS</b>		
<b>Type</b>	<b>Primary nominal current r. m. s <math>I_{PN}</math> (A)</b>	<b>Primary current measuring range <math>I_P</math> (A)</b>
SIOLS200V2	200	±400
SIOLS400V2	400	±800
SIOLS600V2	600	±1200
SIOLS800V2	800	±1600
SIOLS1000V2	1000	±2000
SIOLS2000V2	2000	±3000

**General Description**

For the electronic measurement of currents: DC, AC, pulsed, mixed, with a galvanic isolation between the primary circuit (high power) and the secondary circuit (electronic circuit)

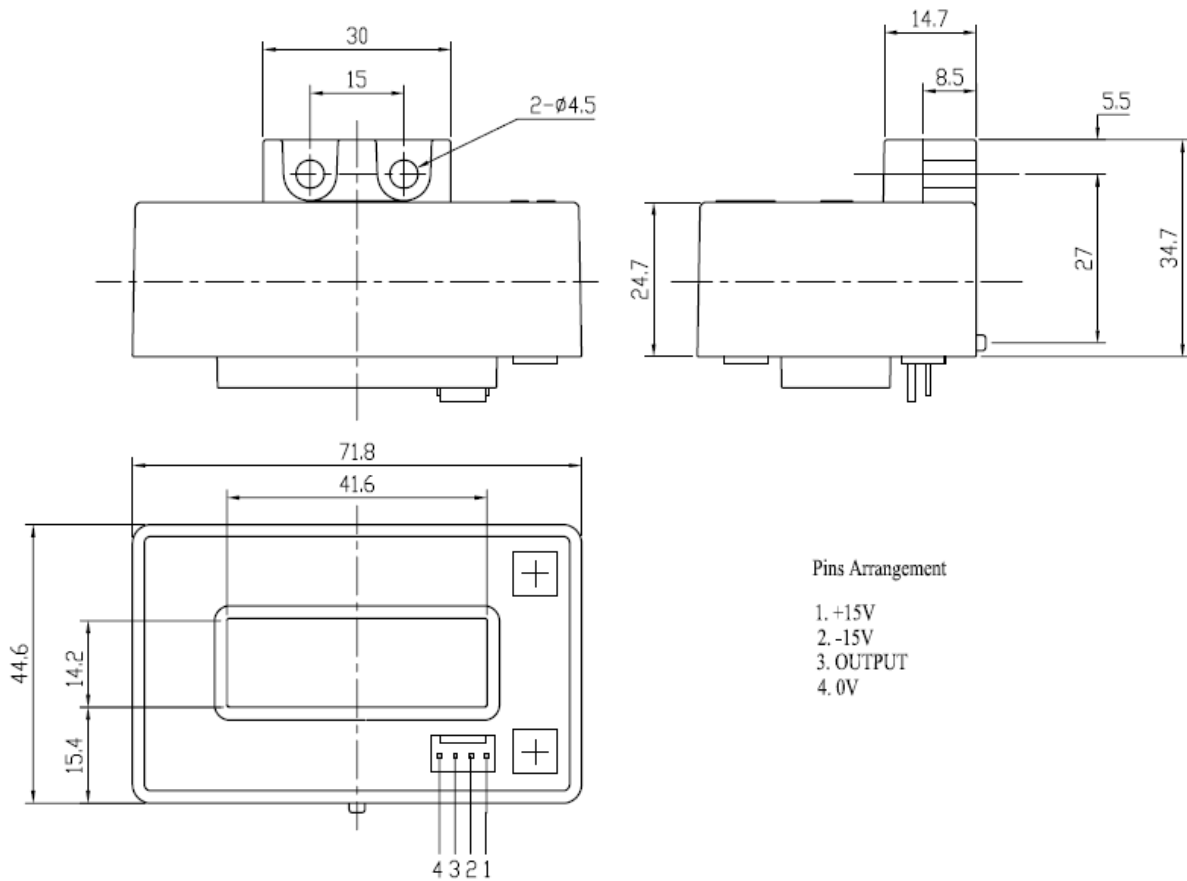
**Parameters Table**

PARAMETERS	SYMBOL	UNIT	VALUE	CONDITIONS
<b>Electrical data</b>				
Supply voltage( $\pm 5\%$ ) <sup>(1)</sup>	$V_C$	V	$\pm 15$	
Current consumption	$I_C$	mA	$\pm 15$	
Output voltage	$V_{out}$	V	$\pm 4$	@ $\pm I_{PN}$ , $R_L = 10\text{ k}\Omega$ , $T_A = 25^\circ\text{C}$
Isolation resistance	$R_{IS}$	$M\Omega$	$>1000$	@ 500 VDC
Output internal resistance	$R_{OUT}$	$\Omega$	100	
Load resistance <sup>(2)</sup>	$R_L$	$K\Omega$	$>10$	
<b>Accuracy - Dynamic performance data</b>				
Linearity <sup>(3)</sup> ( $0 \dots \pm I_{PN}$ )	$\epsilon_L$	% of $I_{PN}$	$<\pm 1$	@ $I_{PN}$ , $T_A = 25^\circ\text{C}$
Accuracy	$X_G$	% of $I_{PN}$	$<\pm 1$	@ $I_{PN}$ , $T_A = 25^\circ\text{C}$ (excluding offset)
Electrical offset voltage	$V_{OE}$	mV	$<\pm 20$	@ $T_A = 25^\circ\text{C}$
Hysteresis offset voltage	$V_{OH}$	mV	$<\pm 10$	@ $I_p = 0$
Temperature coefficient of $V_{OE}$	$TCV_{OE}$	mV/K	$<\pm 1$	
Temperature coefficient of $V_{OUT}$	$TCV_{OUT}$	%/K	$<\pm 0.1$	
Response time	$t_r$	$\mu\text{s}$	$<5$	@ 90% of $I_{PN}$
Frequency bandwidth <sup>(4)</sup>	BW	kHz	DC~25	@ -3dB
<b>General data</b>				
Ambient operating temperature	$T_A$	$^\circ\text{C}$	-40 ~ +85	
Ambient storage temperature	$T_S$	$^\circ\text{C}$	-40 ~ +105	
Mass	m	g	300	
<b>Isolation characteristics</b>				
Rated isolation voltage rms	$V_b$	V	1000	
Rms voltage for AC isolation test	$V_d$	kV	3	@ 50 Hz, 1 min

**Notes:**

- 1) Operating at  $\pm 12\text{V} \leq V_C < \pm 15\text{V}$  will reduce the measuring range.
- 2) If the customer uses  $10\text{K}\Omega$  of the load resistor, the primary current has to be limited as the nominal.
- 3) Linearity data exclude the electrical offset.
- 4) Please refer to derating curves in the technical file to avoid excessive core heating at high frequency.

### Dimensions SIOLSV2 (in mm. 1 mm = 0.0394 inch)



### Instructions of use

- 1) When the test current passes through the sensors you can get the size of the output voltage. (Warning: wrong connection may lead to sensors damage)
- 2) Based on user needs, the sensors output range can be appropriately regulated.
- 3) According to user needs, different rated input currents and output voltages of the sensors can be customized.

## **RESTRICTIONS ON PRODUCT USE**

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