

**Hall Current Sensor TN301..202-OCS**  $I_{PN}=300..2000A$ 

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

LEAD FREE

**● Operating performance (AT= 25 °C)**

Performance	Model	TN301 OCS	TN501 OCS	TN601 OCS	TN102 OCS	TN202 OCS
Primary nominal r.m.s. current	$I_{PN}$ (A)	300	500	600	1000	2000
Primary current measuring range	$I_P$ (A)	0~±600	0~±1000	0~±1200	0~±2000	0~±3000
Supply voltage	$V_{CC}$		±15V (±5%)			
Output voltage	$V_{OUT}$		4V ±1% @± $I_{PN}$ , $R_L = 10K\Omega$			
Current consumption	$I_C$		≤±20mA @ ± $I_{PN}$			
Offset voltage	$V_O$		<±20mV @ $I_P=0, T_A=25^\circ C$			
Linearity	$\epsilon_L$		≤±1% @0~± $I_{PN}$			
Accuracy	X		±1% @ $I_{PN}$			
Response time	$t_r$		<20μs			
di/dt accurately followed	di/dt		>50A/μs			
Thermal drift of $V_O$	$V_{OT}$		≤±0.5mV/°C			
Thermal drift of $V_{OUT}$	$TC\epsilon_G$		<±0.05%/°C			
Hysteresis offset voltage	$V_{OH}$		≤±20mV @ $I_{PN} \rightarrow 0$			
Isolation voltage	$V_d$		6KV @50(60)HZ/1min			
Isolation resistance	$R_{IS}$		500MΩ @500V			
Frequency bandwidth	f		0~500Hz			

**● General data**

Operating temperature	$T_o$	-25~+85°C
Storage temperature	$T_s$	-40~+100°C
Mass	m	410g
Note	Insulated plastic case recognized according to UL 94-V0	

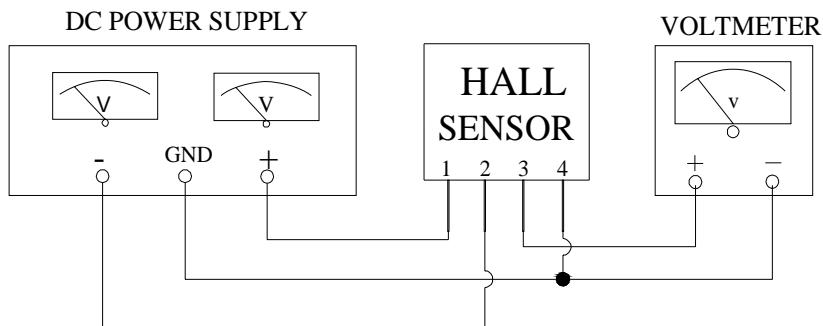
**● Applications**

- |   |   |
|---|---|
| ◆ AC variable speed drives and servo motor drives | ◆ Static converters for DC motor drives   |
| ◆ Battery supplied applications                   | ◆ Switched Mode Power Supplies(SMPS)      |
| ◆ Uninterruptible Power Supplies(UPS)             | ◆ Power supplies for welding applications |

**● Advantages**

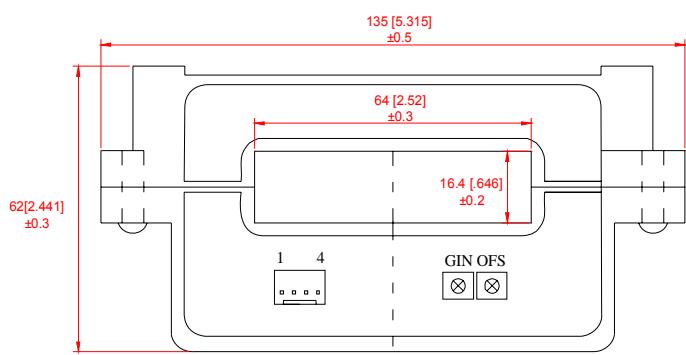
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| ◆ Easy mounting                                  | ◆ Small size and space savings           |
| ◆ Only one design for wide current ratings range | ◆ High immunity to external interference |

## ● Connection

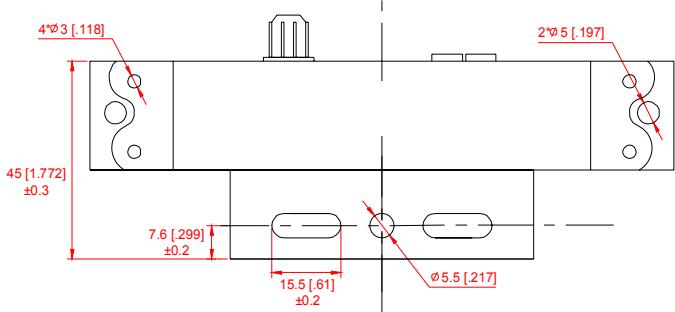
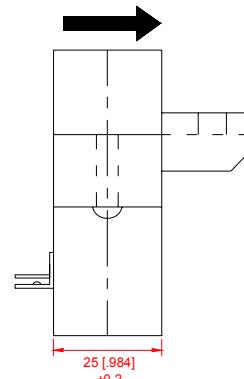


## ● Dimensions (unit: mm/inch)

Front View



Right View



Bottom View

## Secondary terminals

terminal 1	+15V
terminal 2	-15V
terminal 3	Output
terminal 4	0V

connection of secondary  
Molex 22-04-1041

## ● Remarks

- ◆  $V_{OUT}$  is positive when  $I_P$  flows in the direction of the arrow.
- ◆ Temperature of the primary conductor should not exceed 100°C.
- ◆ These are standard models. For different versions(supply voltages, secondary connections, unidirectional measurements, operating temperatures, etc.) please contact us.

JiTIGang 2nd Industrial Area , Huang jiang ,Dongg No.19,Lane428,Sec.2,Chung Shan Rd, HuKou Hsinchu,Taiwan R.O.C

Guang dong ,China Zip Code:523757

Tel:+886-35994440 Fax:+886-3-5902243

Tel:+86-769-83367090 Fax:+86-769-83367590

E:mail:fp@thic.net

E-mail:dgth@thic.net

Http://www.thic.net