

# Hall Current Sensor TU500..301-CCS

$I_{PN}=50..300A$

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.



## • Operating performance ( AT =25°C )

Model		TU500	TU750	TU101	TU201	TU301
Performance		CCS	CCS	CCS	CCS	CCS
Primary nominal r.m.s. current	$I_{PN}$ (A)	50	75	100	200	300
Primary current measuring range	$I_P$ (A)	0~±75	0~±112.5	0~±150	0~±200	0~±300
Supply voltage	$V_{CC}$	±15V ( ±5% )				
Output voltage	$V_{OUT}$	4V ±1% @± $I_{PN}$ , $R_L=10K\Omega$				
Current consumption	$I_C$	≤±120mA @ ± $I_{PN}$				
Offset voltage	$V_O$	< ±25mV @ $I_P=0, T_A=25^\circ C$				
Thermal drift of $V_O$	$V_{OT}$	≤±0.5mV/°C				
Thermal drift of $V_{OUT}$	$TC\epsilon_G$	< ±0.02%/°C@ $I_{PN}$				
di/dt accurately followed	di/dt	> 100A/μs				
Response time	$t_r$	< 3μs				
Linearity	$\epsilon_L$	≤±0.2% @0~± $I_{PN}$				
Accuracy	X	±1% @ $I_{PN}$				
Hysteresis offset voltage	$V_{OH}$	≤±20mV @ $I_P=I_{PN}\rightarrow 0$				
Isolation voltage	$V_d$	3KV @50(60)HZ/1min				
Frequency bandwidth	f	0~100KHz				

## • General data

Operating temperature	$T_O$	-25~+85°C
Storage temperature	$T_S$	-40~+85°C
Mass	m	23g
Note	Insulated plastic case recognized according to UL 94-V0	

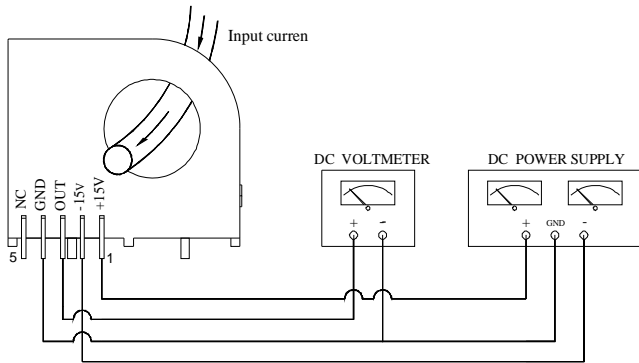
## • Applications

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|--|---|
| <ul style="list-style-type: none"> <li>•AC variable speed drives and servo motor drives</li> <li>•Battery supplied applications</li> <li>•Uninterruptible Power Supplies(UPS)</li> </ul> | <ul style="list-style-type: none"> <li>•Static converters for DC motor drives</li> <li>•Switched Mode Power Supplies(SMPS)</li> <li>•Power supplies for welding applications</li> </ul> |
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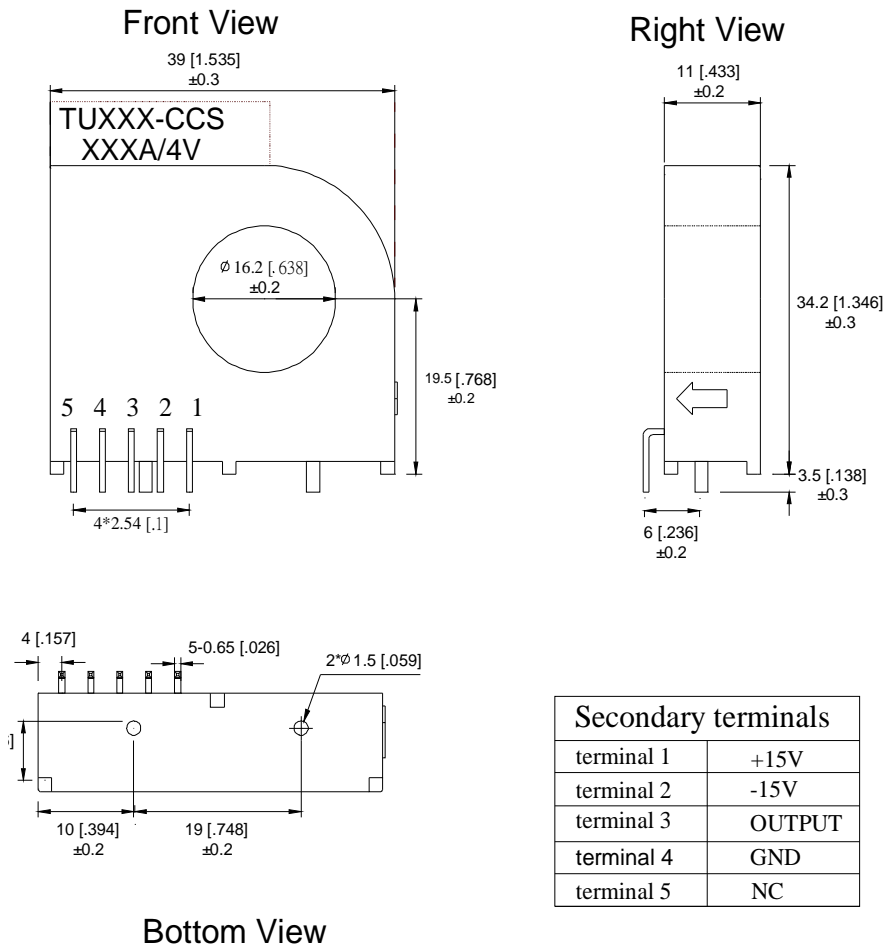
## • Advantages

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|--|---|
| <ul style="list-style-type: none"> <li>•Excellent accuracy</li> <li>•Low temperature drift</li> <li>•Wide frequency bandwidth</li> <li>•Very low insertion losses</li> </ul> | <ul style="list-style-type: none"> <li>•Very good linearity</li> <li>•Optimized response time</li> <li>•High immunity to external interference</li> <li>•Current overload capability</li> </ul> |
|--|---|

• **Connection**



• **Dimensions (unit: mm/inch)**



• **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.