



# DATA SHEET

## Hall Effect Current Sensor

**PN: CHB\_LTA15D3.0**

**IPN=30~300A**

### Feature

- Closed- loop (compensated) current transducer
- Capable measurement of currents: DC, AC, pulse with galvanic isolation between primary circuit and secondary circuit.
- Supply voltage: DC  $\pm 12 \sim 18V$

### Advantages

- High accuracy
- Easy installation
- Low temperature drift
- Optimized response time
- High immunity to external interference
- Very good linearity
- Can be customized

### Applications

- The application of variable frequency electrical appliances
- AC/DC variable-speed drive
- Uninterruptible Power Supplies (UPS)
- Switched Mode Power Supplies (SMPS)
- Inverter applications



**RoHS**

**Electrical data: (Ta=25°C, Vc= ±15VDC, RL=10KΩ, CL=10000pF)**

Parameter \ Ref	CHB30 LTA15D3.0	CHB50 LTA15D3.0	CHB100 LTA15D3.0	CHB200 LTA15D3.0	CHB300 LTA15D3.0
Rated input Ip(A)	30	50	100	200	300
Measuring range Ip(A)	0 ~ ±60	0 ~ ±100	0 ~ ±200	0 ~ ±400	0 ~ ±600
Turns ratio Np/NS (T)	1:500	1:1000	1:1000	1:2000	1:3000
Inside resistance RM (Ω)	50±0.1%	60±0.1%	30±0.1%	30±0.1%	30±0.1%
Output voltage Vo(V)	±3.0*(IP/IPN)				
Supply voltage VC(V)	( ±12 ~ ±18 ) ±5%				
Accuracy XG(%)	@IPN, T=25°C		< ±0.5		
Offset Voltage VOE(mV)	@IP=0, T=25°C		< ±30		
Temperature variation of VOE VOT(mV/°C)	@IP=0, -40 ~ +85°C		< ±0.5		
Linearity error er(%FS)	< 0.1				
Di/dt accurately followed (A/μs)	> 50				
Response time tra(μs)	@90% of IPN		< 1.0		
Power consumption IC(mA)	15+Is				



# Cheemi Technology Co., Ltd

Bandwidth BW(KHZ)	@-3dB,IPN	DC-100
Insulation voltage Vd(KV)	@50/60Hz, 1min,AC	6.0

## General data:

Parameter	Value
Operating temperature TA(°C)	-40 ~ +85
Storage temperature TS(°C)	-55~ +125
Mass M(g)	70
Plastic material	PBT G30/G15, UL94- V0;
Standards	IEC60950-1:2001
	EN50178:1998
	SJ20790-2000

## Dimensions(mm):

Connection

General tolerance

General tolerance: <math>\pm 0.5\text{mm}</math>  
 Primary through-hole :  $D20 \pm 0.15$   
 Connection of Secondary :  
 4 core cable Length  $L=650\text{mm}$ ;

## Remarks:

- When the current goes through the primary pin of a sensor, the voltage will be measured at the output end.
- Custom design is available for the different rated input current and the output voltage.
- The dynamic performance is the best when the primary hole is fully filled with.
- The primary conductor should be  $<100^\circ\text{C}</math>.$

**WARNING : Incorrect wiring may cause damage to the sensor.**

