



# DATA SHEET

## Hall Effect Voltage Sensor

**PN: CHV\_AV5S20**

**IPN=200~1000V**

### Feature

- Closed- loop (compensated) voltage transducer
- Capable measurement of DC and AC voltage with galvanic isolation between primary circuit and secondary circuit.
- Supply voltage: DC+5 V

### Advantages

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

### Applications

- Voltage detection of power distribution cabinet
- AC/DC variable-speed drive
- Uninterruptible Power Supplies (UPS)
- Switched Mode Power Supplies (SMPS)



**RoHS**

### Electrical data: (Ta=25°C, Vc= +5VDC)

Parmeter \ Ref	CHV200 AV5S20	CHV400 AV5S20	CHV600 AV5S20	CHV800 AV5S20	CHV1000 AV5S20
Rated input voltage V <sub>pn</sub> (V)	200	400	600	800	1000
Measuring range V <sub>p</sub> (V)	0 ~ +280	0 ~ +360	0 ~ +840	0 ~ +1120	0 ~ +1400
Turns ratio N <sub>p</sub> /N <sub>S</sub> (T)	1000	1000	1000	1000	1000
Secondary coil resistance R <sub>S</sub> (Ω)	60	60	60	60	60
Output current I <sub>S</sub> (mA)	+20*V <sub>P</sub> /V <sub>PN</sub>				
Inside resistance R <sub>M</sub> (Ω)	【(V <sub>C</sub> -0.5)/I <sub>S</sub> *0.001】 -R <sub>S</sub>				
Supply voltage V <sub>C</sub> (V)	+5.0 ±5%				
Accuracy X <sub>G</sub> (%)	@IPN,T=25°C		< ±0.5		
Offset current I <sub>OE</sub> (mA)	@IP=0,T=25°C		< +0.2		
Temperature variation of IOE I <sub>OT</sub> (mA/°C)	@IP=0,-40 ~ +85°C		< ±0.5		
Linearity error ε <sub>r</sub> (%FS)	< 0.2				
Response time τ <sub>ra</sub> (μs)	@90% of IPN		<40.0		
Power consumption I <sub>C</sub> (mA)	15+I <sub>s</sub>				



Cheemi Technology Co., Ltd

Tel: 025-85996365

E-mail: info@cheemi-tech.com

www.cheemi-tech.com

Add:N22, Xianlongwan, Xianyin South Road, Qixia District, Nanjing - China.

Insulation voltage Vd(KV)	@50/60Hz, 1min,AC	2.5
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General data:	
Parameter	Value
Operating temperature TA(°C)	-40 ~ +85
Storage temperature TS(°C)	-55~ +125
Mass M(g)	50
Plastic material	PBT G30/G15, UL94- V0;
Standards	IEC60950-1:2001
	EN50178:1998
	SJ20790-2000

Dimensions(mm):	
	<h3>Connection</h3>
<h3>General tolerance</h3>	
General tolerance: <math>\pm 0.5\text{mm}</math> Size of Primary pin: DG301-5.0-02P; Secondary pin: DG301-5.0-04P	

Remarks:
<ul style="list-style-type: none"> <li>➤ When the current goes through the primary pin of a sensor, the voltage will be measured at the output end.</li> <li>➤ Custom design is available for the different rated input current and the output voltage.</li> </ul>
<b>WARNING : Incorrect wiring may cause damage to the sensor.</b>

