



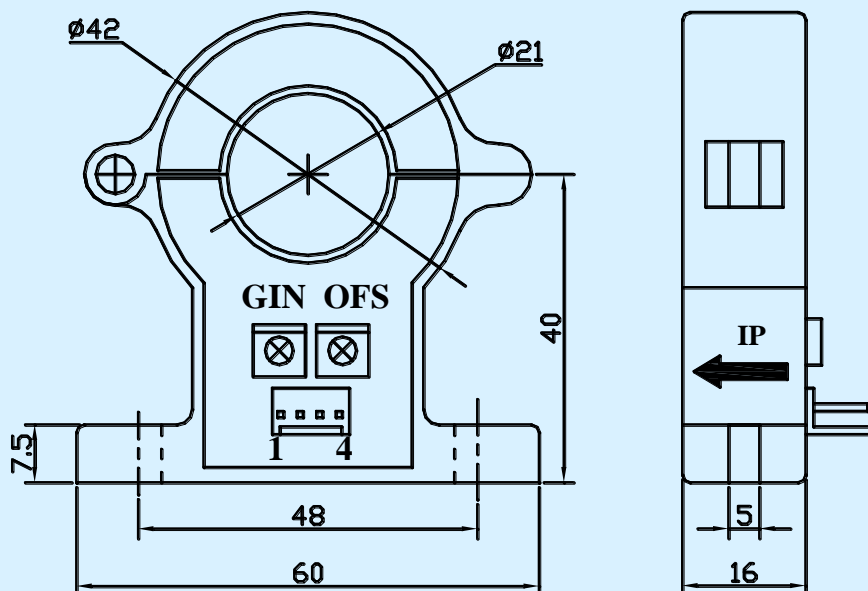
CS500EK1 Hall-effect Current Sensor Series



Open loop current sensor based on the principle of Hall-effect. It can be used for measuring AC,DC,pulsed and mixed current.

Electrical characteristics								
Type	CS050EK1	CS100EK1	CS200EK1	CS300EK1	CS400EK1	CS500EK1		
I_{PN}	Primary nominal input current	50	100	200	300	400	500	A
I_P	Measuring range of primary current	0~±100	0~±200	0~±400	0~±600	0~±800	0~±1000	A
V_{OUT}	Nominal output voltage	4±1%						V
V_C	Supply voltage	±12~±15(±5%)						V
I_C	Current consumption	$V_C=±15V$		<25			mA	
V_D	Insulation voltage	AC/50Hz/1min		3			kV	
ϵ_L	Linearity	<1						%FS
V_O	Offset voltage	$T_A=25^\circ C$		<±25			mV	
V_{OM}	Residual voltage	$I_{PN} \rightarrow 0$		<±25			mV	
V_{OT}	Thermal drift of V_0	$I_P=0$ $T_A=-25\sim+85^\circ C$		<±1			mV/°C	
T_R	Response time	≤7						μs
f	Frequency bandwidth(-3dB)	DC~20						kHz
T_A	Ambient operating temperature	-25~+85						°C
T_S	Ambient storage temperature	-40~+100						°C
R_L	Load resistance	≥10						KΩ
	Standard	Q/3201CHGL02-2007						

Dimensions of drawing (mm)



Elucidation: 1:+15V 2:-15V 3: V_{OUT} 4:0V(GND) OFS:Zero adjustment GIN:Gain adjustment

Remarks

Incorrect connection may lead to the damage of the sensor.

V_{OUT} is positive when the I_P flows in the direction of the arrow.