

CURRENT SENSOR APPLICATION



CURRENT SENSOR Application

Electric Vehicle
Charging Pile
电动汽车充电桩

Founded in 2013, Sinomags is dedicated to the development and production of magnetic sensors. We have Wuxi Lertech, Ningbo, Bengbu and SENSITEC in Germany.

The company's R&D team consists of more than 150 R&D personnel with a number of experts in the field of magnetism and power electronics as the core, covering the design development and production of the whole industrial chain from xMR wafers to sensor modules.

1200/150 people

1200 employees, 150 R&D staff

150 Mpcs

Wafer capacity 150 million pcs/year

100 Mpcs

2022 **current sensor** production capacity exceeds 100 million

250 Mpcs

Cumulative **current sensor** shipments of approximately 250 million units per year



- **Wuxi**
R&D & Headquarter
- **Bengbu**
Production for Current Sensor
- **Ningbo**
R&D & Production for Current Sensor
- **Mainz**
Waferfab for magnetic sensor
- **Wetzlar**
R&D Center for magnetic sensor

Electric Vehicle Charging Pile



IEC Standard (Residual)

UL Standard (Residual)

Full range of products and ranges

Electric Vehicle Charging Pile

Charging pile module			Charging pile module		
Applied Current Sensor	Image		Applied Current Sensor	Image	
PN-01	STK-616TM		PN-01	STK-HD/P, STK-HD/P/G	
PN-02	STK-616KM		PN-02	STK-HD/K, STK-HD/K/G	
PN-03			PN-03		
Vcc	3.3 or 5.0	V	Vcc	3.3 or 5.0	V
I _{pn}	20~65	A	I _{pn}	5.0~50	A
I _{pm}	20~65	A	I _{pm}	10~125	A
F _{band}	600~1500	kHZ	F _{band}	600~1000	kHZ
t _r	0.2~0.9	μs	t _r	1.0	μs
Acc.	3.0~3.5	%FS	Acc.	1.5~3.0	%FS

Charging pile module			Charging pile module		
Applied Current Sensor	Image		Applied Current Sensor	Image	
PN-01	STB-CAS		PN-01	STB-CAS/F	
PN-02	STB-CAS/R		PN-02	STB-CAS/R/F	
PN-03	STB-CAS/K		PN-03	STB-CAS/K/F	
Vcc	5.0	V	Vcc	10~180	V
I _{pn}	15~75	A	I _{pn}	6~75	A
I _{pm}	51~220	A	I _{pm}	20~220	A
F _{band}	400	kHZ	F _{band}	400	kHZ
t _r	0.3	μs	t _r	0.3	μs
Acc.	1.1~3.0	%FS	Acc.	1.1~3.0	%FS

Charging pile module			Charging pile module		
Applied Current Sensor	Image		Applied Current Sensor	Image	
PN-01	STK-PL/A		PN-01	STK-HO	
PN-02	STK-PL/M		PN-02		
PN-03	STK-PL/AG		PN-03		
Vcc		V	Vcc	5.0	V
I _{pn}	10~180	A	I _{pn}	60~120	A
I _{pm}	25~450	A	I _{pm}	150~375	A
F _{band}	400~1000	kHZ	F _{band}	150	kHZ
t _r	0.2~1.5	μs	t _r	2.0	μs
Acc.	2.0	%FS	Acc.	3.0	%FS

Charging pile module			Charging pile module		
Applied Current Sensor	Image		Applied Current Sensor	Image	
PN-01	STK-600/M		PN-01	STK-600/F	
PN-02	STK-600/M-M		PN-02		
PN-03			PN-03		
Vcc	3.3 or 5.0	V	Vcc	5.0	V
I _{pn}	50, 100	A	I _{pn}	50	A
I _{pm}	50~400	A	I _{pm}	200~400	A
F _{band}	120	kHZ	F _{band}	1000	kHZ
t _r	4.6	μs	t _r	0.4	μs
Acc.	3.5	%FS	Acc.	3.5	%FS

Residual current			Residual current		
Applied Current Sensor	Image		Applied Current Sensor	Image	
PN-01	SFG-CPL/A		PN-01	SFG-CPL/B	
I _{pm}	300	mA	I _{pm}	300	mA
I _{pn1}	6	mA DC	I _{pn1}	6	mA DC
I _{pn2}	30	mA rms	I _{pn2}	30	mA rms
F _{band}	2.0	kHZ	F _{band}	2.0	kHZ
t _r	Follow IEC62752		t _r	Follow IEC62752	

