



CURRENT SENSOR

Application

New Energy

新能源应用



Founded in 2013, Sinomags is dedicated to the development and production of magnetic sensors. we have four subsidiary companies in Germany, Wuxi, Ningbo, and Bengbu.

The company's R&D team consists of more than 250 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.

1200/250 employees

1200 employees, 250 R&D staff

500 Mpcs

Wafer capacity 500 million pcs/year

100 Mpcs

2022 *current sensor* production capacity exceeds 100 million

250 Mpcs

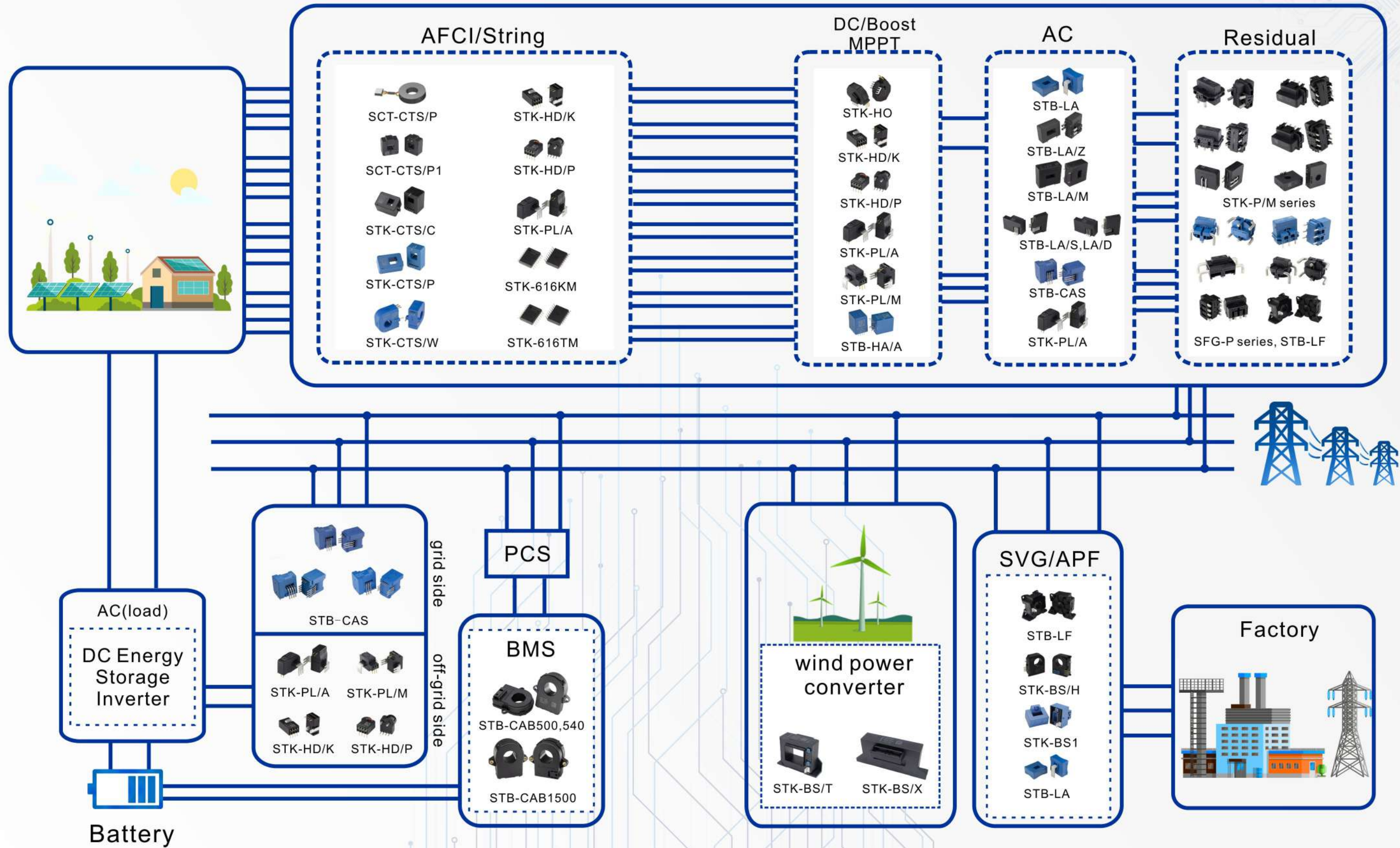
Cumulative *current sensor* shipments of approximately 250 million units



- **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



New Energy Application



Current Sensors For New Energy

◎ Features

- Meet the requirements for high voltage and high altitude
- Meet the requirements for high frequency
- Development based on underlying application requirements

◎ Application: AFCI



SCT-CTS/P1



SCT-CTS/P2



STK-CTS/C1



STK-CTS/P1



STK-CTS/P5



STK-CTS/P6

◎ Isolation & Electrical parameters

Product	Out						ESD rating(HBM)	Application
	Voltage	Current	Self-inspection Inductance(μH)	Induction coil Inductance(μH)	Self-inspection Resistance(Ω)	Induction coil Resistance(Ω)		
SCT-CTS/P1	○		NA	400 ~ 500	NA	0.4 ~ 1	4	AFCI
SCT-CTS/P	○		135 ~ 205	530 ~ 580	0.4 ~ 1	0.8 ~ 2	4	

Product	Out		V_{CC} (V)	U_{ESD} (kV)	U_d (kV)	I_{pn} (A)	I_{pm} (A)	f_{band} (kHz)	t_r (μs)	Acc. (%FS)	Application
	Voltage	Current									
STK-CTS/C	○		5	4	4	12.8 ~ 16	32 ~ 40	400	1	1	AFCI
STK-CTS/P	○		5	4	4	12.8, 20 ~ 50	20 ~ 50	400	1	1	

◎ Application: String



STK-CTS/C1



STK-CTS/P1



STK-CTS/P5



STK-CTS/P6



STK-CTS/W



STK-HD/K



STK-HD/P



STK-616TM



STK-616KM



STK-616EM



STK-616DM



STK-616BM

◎ Isolation & Electrical parameters

Product	Out		V_{CC} (V)	U_{ESD} (kV)	U_d (kV)	I_{pn} (A)	I_{pm} (A)	f_{band} (kHz)	t_r (μs)	Acc. (%FS)	Application
	Voltage	Current									
STK-CTS/C	○		5	4	4	12.8 ~ 16	32 ~ 40	400	1	3	String
STK-CTS/W	○		5	4	4	15 ~ 25	15 ~ 25	400	1	2	
STK-CTS/P	○		5	4	4	12.8, 20 ~ 50	20 ~ 50	400	1	2.5 ~ 3	
STK-616KML	○		5, 3.3	4	3.6	40 ~ 65	40 ~ 65	600	0.9	3	
STK-616KMF	○		5, 3.3	4	3.6	40 ~ 65	40 ~ 65	1000	0.2	3	
STK-616TML	○		5, 3.3	4	3.6	40 ~ 65	40 ~ 65	600	0.9	3.5	
STK-616TMF	○		5, 3.3	4	3.6	40 ~ 65	40 ~ 65	1500	0.2	3.5	
STK-616BML	○		5, 3.3	4	3.6	12.5 ~ 25	37.5 ~ 75	600	0.9	3.5	
STK-616DML	○		5, 3.3	4	3.6	15 ~ 65	15 ~ 65	600	0.9	3.5	
STK-616EML	○		5, 3.3	4	3.6	20 ~ 65	20 ~ 65	600	0.9	3.5	
STK-PL/A	○		5	4	5	10 ~ 50	25 ~ 125	400	1.5	2	
STK-PL/M	○		5	4	5	80 ~ 180	200 ~ 450	500	1	2	
STK-HD/K	○		5	4	4	32 ~ 50	80 ~ 125	600	1	1.5	
STK-HD/P	○		5, 3.3	4	4	5 ~ 30	10 ~ 75	600	1	3	

◎ Application: MPPT



STK-HO



STK-HD/K



STB-HD/P



STB-HA/A



STK-PL/A



STK-PL/M

◎ Isolation & Electrical parameters

Product	Out		V _{cc} (V)	U _{ESD} (kV)	U _d (kV)	I _{pn} (A)	I _{pm} (A)	f _{band} (kHz)	t _r (μs)	Acc. (%FS)	Application
	Voltage	Current									
STK-HO	○		5	4	4	60~150	150~375	150	2	3	MPPT
STK-HD/P	○		5, 3.3	4	4	5~30	10~75	600	1	3	
STK-HD/K	○		5	4	4	32~50	80~125	600	1	1.5	
STB-HA/A	○		±15	4	4	10~60	30~180	150	1.5	0.8(1.5)	
STK-PL/A	○		5	4	5	10~50	25~125	400	1.5	2	
STK-PL/M	○		5	4	5	80~180	200~450	500	1	2	

◎ Application: BMS



STB-CAB500



STB-CAB540



STB-CAB1500

Product	Out		V _{cc} (V)	U _{ESD} (kV)	U _d (kV)	I _{pn} (A)	I _{pm} (A)	f _{band} (kHz)	t _r (μs)	Acc. (%FS)	Application
	Voltage	Current									
STB-CAB	○		12	4	2.5	500~1500	500~150	NA	NA	0.5	BMS

◎ Application: AC



STB-CAS



STB-CAS/F



STK-HD/P



STK-HD/K



STB-LA/S



STB-LA/D



STB-LA/Z



STB-LA/M



STB-LA(N)



STK-PL/A



STK-PL/M

◎ Isolation & Electrical parameters

Product	Out		V _{cc} (V)	U _{ESD} (kV)	U _d (kV)	I _{pn} (A)	I _{pm} (A)	f _{band} (kHz)	t _r (μs)	Acc. (%FS)	Application
	Voltage	Current									
STB-CAS/x	○		5	4	5	15~75	51~220	400	0.3	1.1~3	AC
STB-CAS/F	○		5	4	5	6~75	20~220	400	0.3	1.1~1.6	
STB-LA/S	○		5	4	4	100	220	300	0.5	1.1	
STB-LA/D	○		±15	4	4	55~100	55~175	150	0.5	1.5	
STB-LA(N)	○		12~15	4	4	100~150	200~240	150	0.5	0.5	
STB-LA/Z	○		5	4	4	150~200	300~450	300	0.3	0.8	
STB-LA/M	○		5	4	4	300	600	300	0.6	1.1	
STK-PL/A	○		5	4	5	10~50	25~125	400	1.5	2	AC (Load)
STK-PL/M	○		5	4	5	80~180	200~450	500	1	2	
STK-HD/K	○		5	4	4	32~50	80~125	600	1	1.5	
STK-HD/P	○		5, 3.3	4	4	5~30	10~75	600	1	3	AC (grid)
STB-CAS/x	○		5	4	5	15~75	51~220	400	0.3	1.1~3	

Current Sensors For Wind power

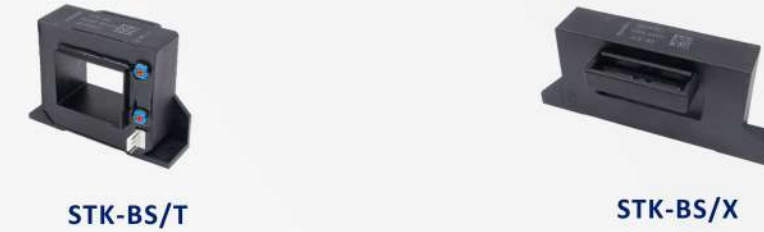
Application: Residual



Isolation & Electrical parameters

Product	Out		V _{cc} (V)	U _{ESD} (kV)	U _d (kV)	I _{pn} (A)	I _{pm} (A)	f _{band} (kHz)	t _r (μs)	Acc. (%FS)	Application
	Voltage	Current									
STK-P/M	○		5	NA	5	0.3~1.02	0.5~1.7	0.7	700	4	Residual
SFG-P	○		5	NA	4	0.3~5	0.5~10	15	30~50	3.2	
SFG-P/N1	○		5	NA	4	0.3~5	0.5~10	15	30~50	3.2	
SFG-P/P2F	○		5	NA	4	0.3~3	0.5~5	15	40~50	3.2	
SFG-P/P3	○		5	NA	4	3~5	5~8	15	40	3.2	
SFG-P/P4	○		5	NA	4	3~5	5~8	15	40	3.2	
SFG-P/S	○		5	5	4	0.3~1	0.5~1.7	0.7	700	4	

Application: wind power



Isolation & Electrical parameters

Product	Out		V _{cc} (V)	U _{ESD} (kV)	U _d (kV)	I _{pn} (A)	I _{pm} (A)	f _{band} (kHz)	t _r (μs)	Acc. (%FS)	Application
	Voltage	Current									
STK-BS/T	○		±15	4	4	200~1500	600~2500	25	5	1	wind power
STK-BS/X	○		±15	4	4	500~2500	1500~5500	25	5	1	

