



# CURRENT SENSOR

Application

电流传感器  
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, 150 R&D staff

**500 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

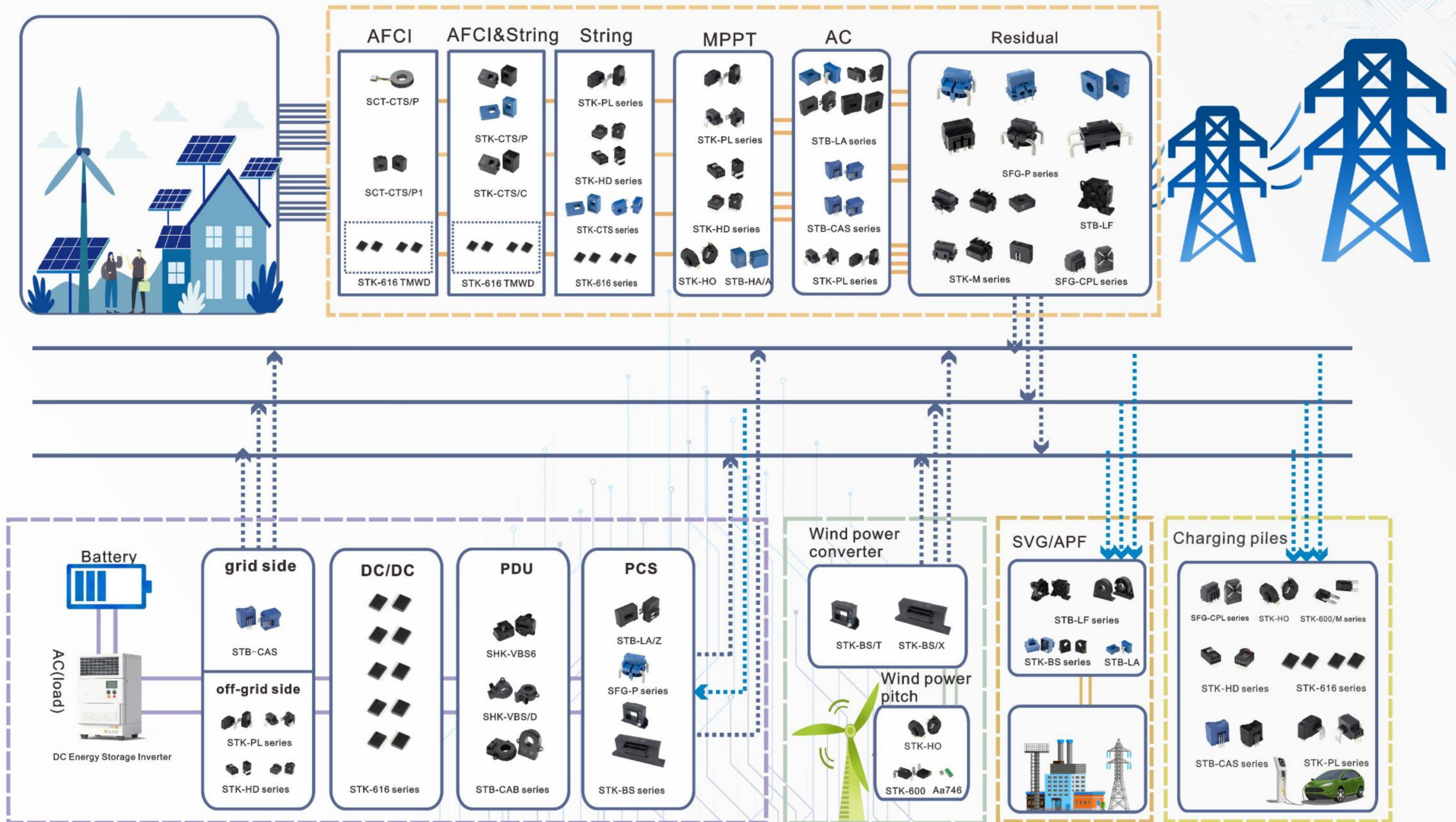
## CURRENT SENSOR APPLICATION



- **Wuxi**  
R&D & Headquater
- **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





## ◎ Features

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

## ◎ 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/PI | ○       |         | 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 <sub>cc</sub> (V) | U <sub>ESD</sub> (kV) | U <sub>d</sub> (kV) | I <sub>pn</sub> (A) | I <sub>pm</sub> (A) | f <sub>band</sub> (kHz) | t <sub>r</sub> (μs) | Acc. (%FS) | Application                 |
|-------------|---------|---------|---------------------|-----------------------|---------------------|---------------------|---------------------|-------------------------|---------------------|------------|-----------------------------|
|             | Voltage | Current |                     |                       |                     |                     |                     |                         |                     |            |                             |
| STK-CTS/C   | ○       |         | 5                   | 4                     | 4                   | 12.8~16             | 32~40               | 400                     | 1                   | 1          | AFCI & String               |
| STK-CTS/P   | ○       |         | 5                   | 4                     | 4                   | 12.8, 20~50         | 20~50               | 400                     | 1                   | 1          |                             |
| STK-CTS/W   | ○       |         | 5                   | 4                     | 4                   | 15~25               | 15~25               | 400                     | 1                   | 2          |                             |
| STK-CTS/C   | ○       |         | 5                   | 4                     | 4                   | 12.8~16             | 32~40               | 400                     | 1                   | 3          |                             |
| STK-CTS/P   | ○       |         | 5                   | 4                     | 4                   | 12.8, 20~50         | 20~50               | 400                     | 1                   | 2.5~3      |                             |
| STK-616TMWD | ○       |         | 5, 3.3              | 4                     | 3.6                 | 20~65               | 23~74.7             | 600                     | 0.2                 | 3.5        | AFCI / AFCL&String / String |
| STK-616KML  | ○       |         | 5, 3.3              | 4                     | 3.6                 | 40~65               | 46~74.7             | 600                     | 0.9                 | 3          |                             |
| STK-616KMF  | ○       |         | 5, 3.3              | 4                     | 3.6                 | 30~65               | 36.5~74.7           | 1500                    | 0.2                 | 3          |                             |
| STK-616TML  | ○       |         | 5, 3.3              | 4                     | 3.6                 | 20~65               | 23~74.7             | 600                     | 0.9                 | 3.5        |                             |
| STK-616TMF  | ○       |         | 5, 3.3              | 4                     | 3.6                 | 40~65               | 46~74.7             | 1500                    | 0.2                 | 3.5        |                             |
| STK-616TMM  | ○       |         | 5, 3.3              | 4                     | 3.6                 | 20~65               | 23~74.7             | 500                     | 0.2                 | 3.5        |                             |
| STK-616HM   | ○       |         | 5, 3.3              | 4                     | 3.6                 | 20~65               | 23~74.7             | 600                     | 0.9                 | 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        |                             |

## ◎ Isolation & Electrical parameters

| Product   | Out     |         | V <sub>cc</sub> (V) | U <sub>ESD</sub> (kV) | U <sub>d</sub> (kV) | I <sub>pn</sub> (A) | I <sub>pm</sub> (A) | f <sub>band</sub> (kHz) | t <sub>r</sub> (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-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          | MPPT        |
| STK-HO    | ○       |         | 5                   | 4                     | 4                   | 60~150              | 150~375             | 150                     | 2                   | 3          |             |
| 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          | AC          |
| STB-CAS/x | ○       |         | 5                   | 4                     | 5                   | 15~75               | 51~220              | 400                     | 0.3                 | 1.1~3      |             |
| 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        | AC (Load)   |
| 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          |             |
| 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          |             |
| STB-CAS/x | ○       |         | 5                   | 4                     | 5                   | 15~75               | 51~220              | 400                     | 0.3                 | 1.1~3      | AC (grid)   |



## Application: wind power

### Isolation & Electrical parameters

| Product     | Out     |         | V <sub>cc</sub><br>(V) | U <sub>ESD</sub><br>(kV) | U <sub>d</sub><br>(kV) | I <sub>pn</sub><br>(A) | I <sub>pm</sub><br>(A) | f <sub>band</sub><br>(kHz) | t <sub>r</sub><br>(μs) | Acc.<br>(%FS) | Application |
|-------------|---------|---------|------------------------|--------------------------|------------------------|------------------------|------------------------|----------------------------|------------------------|---------------|-------------|
|             | Voltage | Current |                        |                          |                        |                        |                        |                            |                        |               |             |
| STK-616KML  | ○       |         | 5, 3.3                 | 4                        | 3.6                    | 40~65                  | 46~74.7                | 600                        | 0.9                    | 3             | DC/DC       |
| STK-616KMF  | ○       |         | 5, 3.3                 | 4                        | 3.6                    | 30~65                  | 36.5~74.7              | 1500                       | 0.2                    | 3             |             |
| STK-616TML  | ○       |         | 5, 3.3                 | 4                        | 3.6                    | 20~65                  | 23~74.7                | 600                        | 0.9                    | 3.5           |             |
| STK-616TMF  | ○       |         | 5, 3.3                 | 4                        | 3.6                    | 40~65                  | 46~74.7                | 1500                       | 0.2                    | 3.5           |             |
| STK-616TMM  | ○       |         | 5, 3.3                 | 4                        | 3.6                    | 20~65                  | 23~74.7                | 500                        | 0.2                    | 3.5           |             |
| STK-616TMW  | ○       |         | 5, 3.3                 | 4                        | 3.6                    | 2~65                   | 7.4~65                 | 600                        | 0.2                    | 3.5           |             |
| STK-616TMWD | ○       |         | 5, 3.3                 | 4                        | 3.6                    | 20~65                  | 23~74.7                | 600                        | 0.2                    | 3.5           |             |
| STK-616HM   | ○       |         | 5, 3.3                 | 4                        | 3.6                    | 20~65                  | 23~74.7                | 600                        | 0.9                    | 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           | Residual    |
| STK-P/M     | ○       |         | 5                      | NA                       | 5                      | 0.3~1.02               | 0.5~1.7                | 0.7                        | 700                    | 4             |             |
| 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             |             |
| STB-LF      | ○       |         | ±15                    | NA                       | 4                      | 100                    | 200                    | 1000                       | 0.2                    | 3             | PDU         |
| SHK-VBS6/S2 | ○       |         | 5                      | 8                        | 2.5                    | 100~1500               | 100~1500               | 40                         | 2                      | 3.25          |             |
| SHK-VBS/D   | ○       |         | 5                      | 8                        | 2.5                    | 75~1000                | 75~1000                | 10                         | 18                     | 0.35~2.5      |             |
| STB-CAB     |         | ○       | 12                     | 4                        | 2.5                    | 500~1500               | 500~1500               | NA                         | NA                     | 0.5~1         |             |



STK-HO



STK-600



STK-BS/T



STK-BS/X

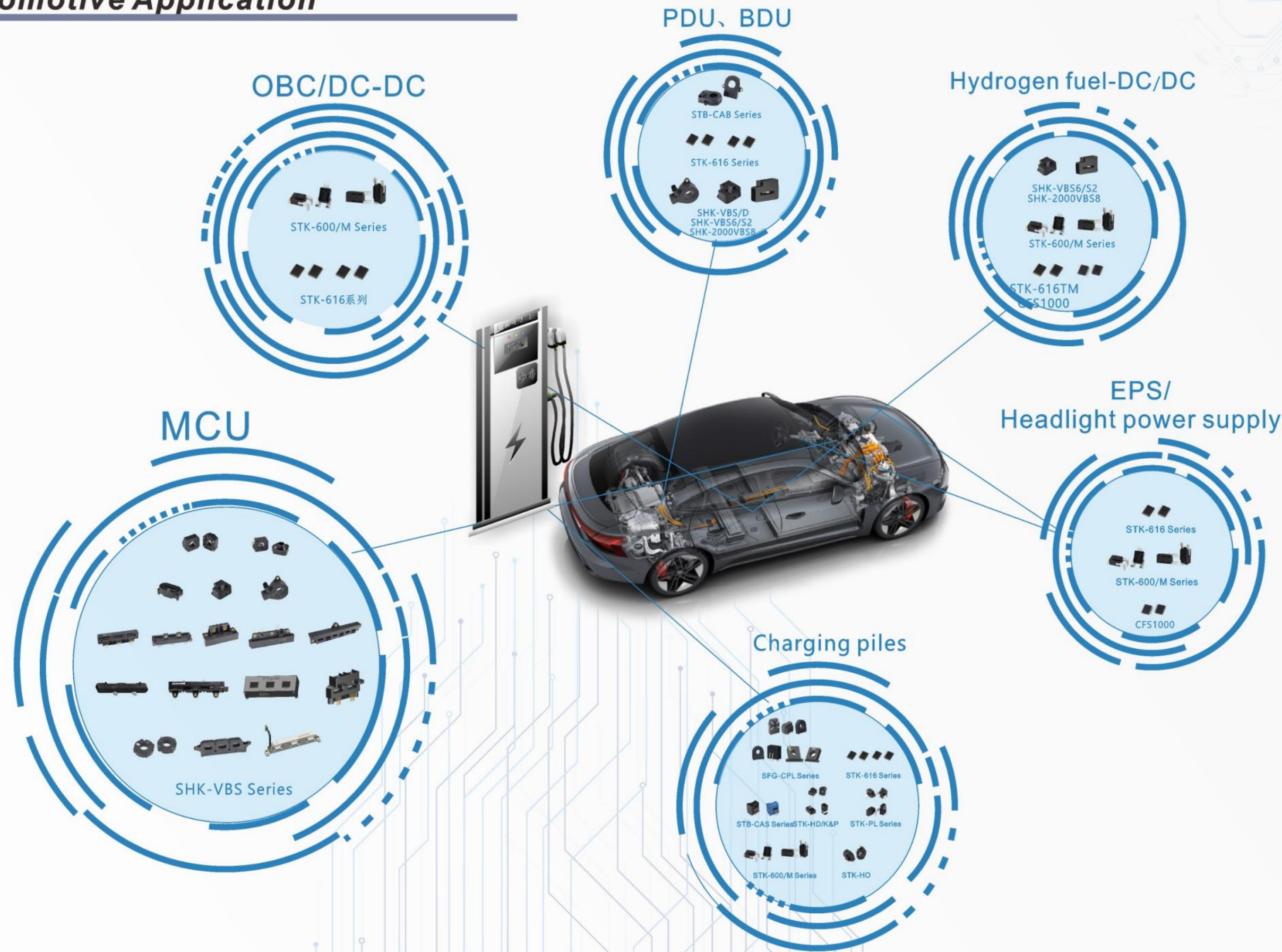
### Isolation & Electrical parameters

| Product  | Out     |         | V <sub>cc</sub><br>(V) | U <sub>ESD</sub><br>(kV) | U <sub>d</sub><br>(kV) | I <sub>pn</sub><br>(A) | I <sub>pm</sub><br>(A) | f <sub>band</sub><br>(kHz) | t <sub>r</sub><br>(μs) | Acc.<br>(%FS) | Application             |
|----------|---------|---------|------------------------|--------------------------|------------------------|------------------------|------------------------|----------------------------|------------------------|---------------|-------------------------|
|          | Voltage | Current |                        |                          |                        |                        |                        |                            |                        |               |                         |
| STK-HO   | ○       |         | 5                      | 4                        | 4                      | 60~150                 | 150~375                | 150                        | 2                      | 3             | wind<br>power pitch     |
| STK-600  | ○       |         | 5                      | 4                        | 4                      | 50~100                 | 50~400                 | 180                        | 2                      | 3.5           |                         |
| STK-BS/T | ○       |         | ±15                    | 4                        | 4                      | 200~1500               | 600~2500               | 25                         | 5                      | 1             | wind<br>power converter |
| STK-BS/X | ○       |         | ±15                    | 4                        | 4                      | 500~2500               | 1500~5500              | 25                         | 5                      | 1             |                         |





**EV / Automotive Application**





◎ Features

- AEC-Q100 Qualified
- ISO26262 (certification in progress)
- Wide range of current detection
- Excellent EMC performance

●Electrical parameters

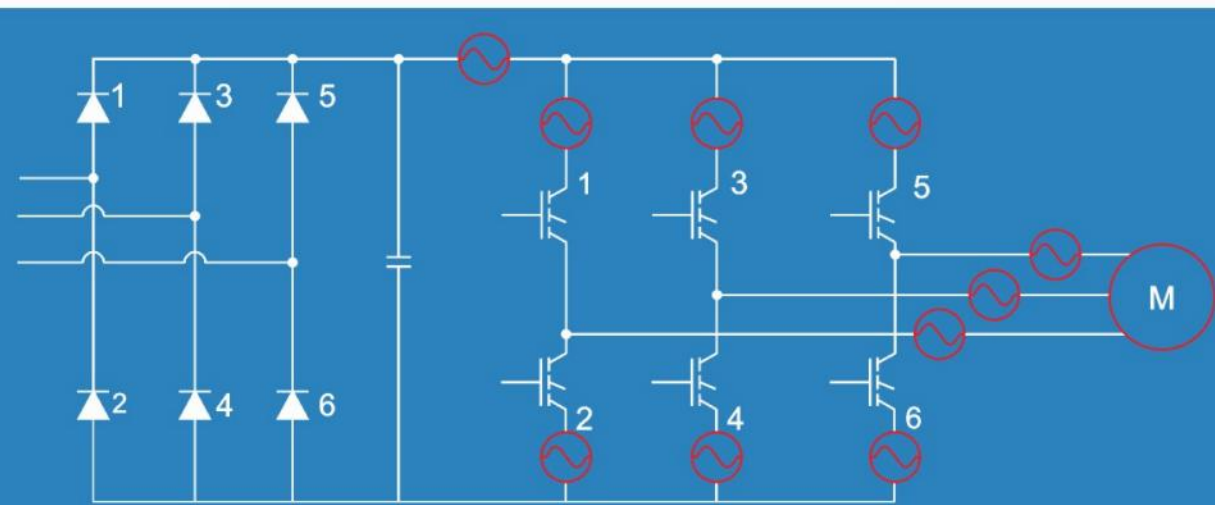
| Product     | Out    |         |         | Vcc<br>(V) | I <sub>pn</sub><br>(A) | I <sub>pm</sub><br>(A) | f <sub>band</sub><br>(kHz) | t <sub>r</sub><br>(μs) | Application |
|-------------|--------|---------|---------|------------|------------------------|------------------------|----------------------------|------------------------|-------------|
|             | Voltag | Digital | Current |            |                        |                        |                            |                        |             |
| STB-CAB     |        | ○       |         | 12         | 500~1500               | 500~1500               | NA                         | NA                     | BDU         |
| SHK-VBS/D-A | ○      |         |         | 5          | 75~1000                | 75~1000                | 10                         | 18                     |             |
| SHK-VBS/D-B | ○      |         |         | 5          | 75~750                 | 75~750                 | 10                         | 18                     |             |
| SHK-VBS/D-C | ○      |         |         | 5          | 75~500                 | 75~500                 | 10                         | 18                     |             |
| SHK-VBS6/S2 | ○      |         |         | 5          | 100~1500               | 100~1500               | 40                         | 2                      |             |
| SHK-VBS/T3  | ○      |         |         | 5          | 545                    | ±1090                  | 100                        | 3.5                    | MCU         |
| SHK-VBS/T4  | ○      |         |         | 5          | 545                    | ±1090                  | 100                        | 3.5                    |             |
| SHK-VBS/T5  | ○      |         |         | 5          | 300                    | 300                    | 40                         | 2                      |             |
| SHK-VBS/T6  | ○      |         |         | 5          | 800~1200               | 800~1200               | 40                         | 2                      |             |
| SHK-VBS/T7  | ○      |         |         | 5          | 600                    | 300、600                | 40                         | 2                      |             |
| SHK-VBS/T8  | ○      |         |         | 5          | 300~1200               | 300~1200               | 40                         | 4                      |             |
| SHK-VBS/T9  | ○      |         |         | 5          | 900                    | 900                    | 40                         | 2                      |             |
| SHK-VBS/TE  | ○      |         |         | 5          | 200                    | 300                    | 40                         | 4                      |             |
| SHK-VBS/TF  | ○      |         |         | 5          | 300                    | 200                    | 100                        | 3.5                    |             |
| SHK-VBS/TG  | ○      |         |         | 15         | 50~150                 | 150~450                | 60                         | 7                      |             |
| SHK-VBS/TH  | ○      |         |         | 5          | 660                    | 660                    | 40                         | 2                      |             |
| SHK-VBS2/D  | ○      |         |         | 5          | 545                    | ±1090                  | NC                         | 3.5                    |             |
| SHK-VBS3/S5 | ○      |         |         | 5          | 400~900                | 400~900                | 100                        | 3.5                    |             |
| SHK-VBS5/S2 | ○      |         |         | 5          | 100~900                | 100~900                | 100                        | 3.5                    |             |
| SHK-VBS6/S2 | ○      |         |         | 5          | 100~1500               | 100~1500               | 40                         | 2                      |             |

●Electrical parameters

| Product     | Out    |         |         | Vcc<br>(V) | I <sub>pn</sub><br>(A) | I <sub>pm</sub><br>(A) | f <sub>band</sub><br>(kHz) | t <sub>r</sub><br>(μs) | Application                                     |
|-------------|--------|---------|---------|------------|------------------------|------------------------|----------------------------|------------------------|-------------------------------------------------|
|             | Voltag | Digital | Current |            |                        |                        |                            |                        |                                                 |
| STK-PL/A    | ○      |         |         | 5          | 10~50                  | 25~125                 | 400                        | 1.5                    | Charging<br>Piles                               |
| STK-PL/M    | ○      |         |         | 5          | 80~180                 | 250~450                | 500                        | 1                      |                                                 |
| STK-600/M-M | ○      |         |         | 5, 3.3     | 50~100                 | 50~250                 | 120                        | 4.6                    |                                                 |
| STK-600/M   | ○      |         |         | 5, 3.3     | 50~100                 | 50~400                 | 120                        | 4.6                    |                                                 |
| SHK-VBS/TE  | ○      |         |         | 5          | 200                    | 300                    | 40                         | 4                      | Electric<br>motorcycle                          |
| STK-LBS/6G  | ○      |         |         | 5          | 100~1000               | 100~1000               | 250                        | 3                      |                                                 |
| SHK-VBS6    | ○      |         |         | 5          | 100~1500               | 100~1500               | 40                         | 2                      | Air<br>Compressor<br>&<br>DC/DC<br>Power Supply |
| STK-600/M   | ○      |         |         | 5, 3.3     | 50,100                 | 50~400                 | 120                        | 4.6                    |                                                 |
| STK-600/M-M | ○      |         |         | 5, 3.3     | 50,100                 | 50~250                 | 120                        | 4.6                    |                                                 |
| STK-616KML  | ○      |         |         | 5, 3.3     | 40~65                  | 40~65                  | 600                        | 0.9                    |                                                 |
| STK-616KMF  | ○      |         |         | 5, 3.3     | 40~65                  | 40~65                  | 1000                       | 0.2                    |                                                 |
| STK-616TML  | ○      |         |         | 5, 3.3     | 40~65                  | 40~65                  | 600                        | 0.9                    |                                                 |
| STK-616TMF  | ○      |         |         | 5, 3.3     | 40~65                  | 40~65                  | 1500                       | 0.2                    |                                                 |
| STK-616BML  | ○      |         |         | 5, 3.3     | 12.5~25                | 37.5~75                | 600                        | 0.9                    |                                                 |
| STK-616DML  | ○      |         |         | 5, 3.3     | 15~65                  | 15~65                  | 600                        | 0.9                    | Headlight<br>power supply                       |
| STK-616EML  | ○      |         |         | 5, 3.3     | 20~65                  | 20~65                  | 600                        | 0.9                    |                                                 |
| STK-616ZM   | ○      |         |         | 5, 3.3     | 20~50                  | 20~50                  | 2000                       | 0.05                   |                                                 |
| STK-616YM   | ○      |         |         | 5, 3.3     | 20~65                  | 20~65                  | 350                        | 1.2                    | OBC                                             |
| STK-600/M   | ○      |         |         | 5, 3.3     | 50, 100                | 50~400                 | 120                        | 4.6                    |                                                 |
| STK-616KMF  | ○      |         |         | 5, 3.3     | 40~65                  | 40~65                  | 1000                       | 0.5                    |                                                 |
| STK-616TML  | ○      |         |         | 5, 3.3     | 40~65                  | 40~65                  | 600                        | 0.9                    |                                                 |
| STK-616TMF  | ○      |         |         | 5, 3.3     | 40~65                  | 40~65                  | 1500                       | 0.3                    | EPS                                             |
| STK-600/M   | ○      |         |         | 5, 3.3     | 50,100                 | 50~400                 | 120                        | 4.6                    |                                                 |
| STK-600/M-M | ○      |         |         | 5, 3.3     | 50,100                 | 50~250                 | 120                        | 4.6                    |                                                 |
| STK-616YML  | ○      |         |         | 5, 3.3     | 20~50                  | 20~50                  | 400                        | 1                      | PDU                                             |
| CFS1000     | ○      |         |         | 5          | 10~1000                | 30~1200                | 500                        | 1                      |                                                 |
| STK-616KMF  | ○      |         |         | 5, 3.3     | 40~65                  | 40~65                  | 1000                       | 0.5                    |                                                 |
| STK-616TML  | ○      |         |         | 5, 3.3     | 40~65                  | 40~65                  | 600                        | 0.9                    |                                                 |
| STK-616TMF  | ○      |         |         | 5, 3.3     | 40~65                  | 40~65                  | 1500                       | 0.3                    |                                                 |
| STK-616ZMF  | ○      |         |         | 5, 3.3     | 20~50                  | 20~50                  | 2000                       | 0.05                   |                                                 |
| STK-616YML  | ○      |         |         | 5, 3.3     | 20~50                  | 20~50                  | 400                        | 1                      |                                                 |



# Driver Application



## — PRODUCT —

### ◎ Features

- High accuracy
- Low noise
- Wide current detection range
- Fast response time

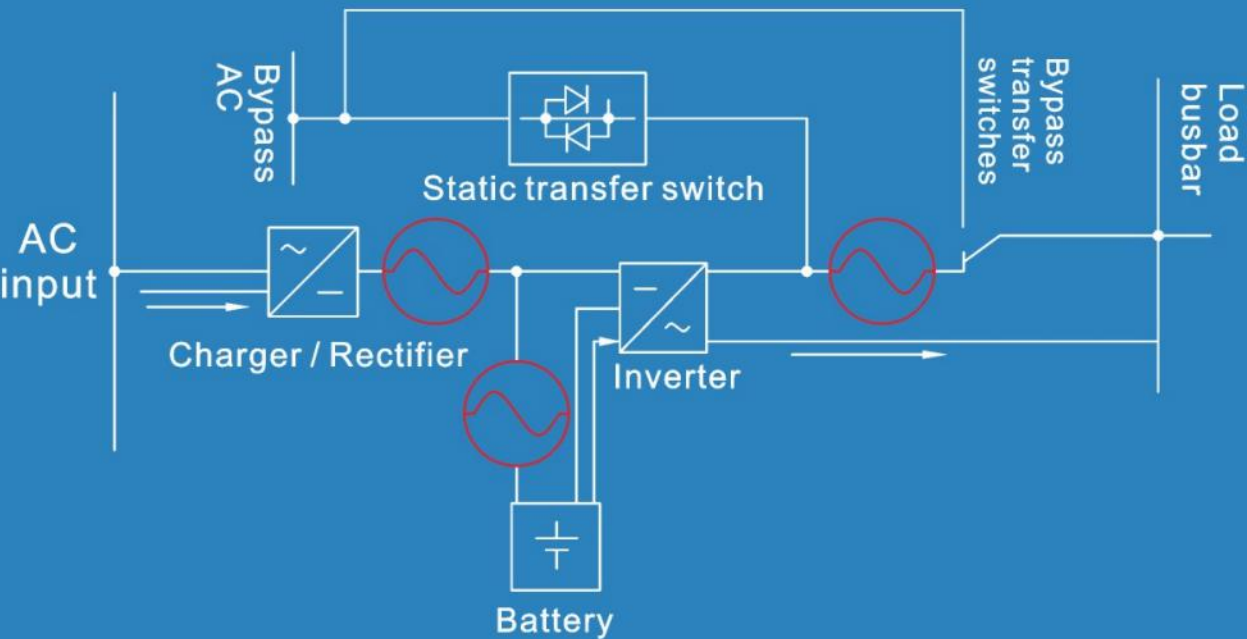
|                                                                                                  |                                                                                                  |                                                                                                      |                                                                                                       |                                                                                                      |
|--------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|
| <br>STB-CAS   | <br>STB-CAS/F | <br>STK-616KM, TM | <br>STK-616EM, DM | <br>STK-BS1     |
| <br>STK-BS/S1 | <br>STK-BS/H  | <br>STK-BS/T      | <br>STK-BS/X      | <br>STB-LA      |
| <br>STB-LA/Z  | <br>STK-HD/P  | <br>STK-HD/S      | <br>STB-600/M     | <br>STB-600/M-M |
| <br>STK-600   | <br>STK-HA/A  | <br>STB-HA/A3     | <br>STK-PL/A      | <br>STK-PL/M    |

### ◎Electrical parameters

| Product     | Out     |         |         | Vcc<br>(V) | I <sub>pn</sub><br>(A) | I <sub>pm</sub><br>(A) | f <sub>band</sub><br>(kHz) | t <sub>r</sub><br>(μs) | Application              |
|-------------|---------|---------|---------|------------|------------------------|------------------------|----------------------------|------------------------|--------------------------|
|             | Voltage | Digital | Current |            |                        |                        |                            |                        |                          |
| STB-CAS/F   | ○       |         |         | 5          | 6~75                   | 20~220                 | 400                        | 0.3                    | Servo Drive              |
| STK-616KML  | ○       |         |         | 5, 3.3     | 40~65                  | 40~65                  | 600                        | 0.9                    |                          |
| STK-616KMF  | ○       |         |         | 5, 3.3     | 40~65                  | 40~65                  | 1000                       | 0.2                    |                          |
| STK-616TML  | ○       |         |         | 5, 3.3     | 40~65                  | 40~65                  | 600                        | 0.9                    |                          |
| STK-616TMF  | ○       |         |         | 5, 3.3     | 40~65                  | 40~65                  | 1500                       | 0.2                    |                          |
| STK-616BML  | ○       |         |         | 5, 3.3     | 12.5~25                | 37.5~75                | 600                        | 0.9                    |                          |
| STK-616DML  | ○       |         |         | 5, 3.3     | 15~65                  | 15~65                  | 600                        | 0.9                    |                          |
| STK-616EML  | ○       |         |         | 5, 3.3     | 20~65                  | 20~65                  | 600                        | 0.9                    |                          |
| STK-HD/P    | ○       |         |         | 5, 3.3     | 5~30                   | 10~75                  | 600                        | 1                      |                          |
| STK-HD/S    | ○       |         |         | 5          | 3~10                   | 7.5~25                 | 150                        | 2                      |                          |
| STK-PL/A    | ○       |         |         | 5          | 10~50                  | 25~125                 | 400                        | 1.5                    |                          |
| STK-PL/M    | ○       |         |         | 5          | 80~180                 | 200~450                | 500                        | 1                      |                          |
| STK-BS/S1   | ○       |         |         | 5          | 50~600                 | 150~1100               | 60                         | 3.5                    | Variable frequency drive |
| STK-BS/H    | ○       |         |         | ±15        | 50~400                 | 150~600                | 50                         | 3                      |                          |
| STK-BS/H4   | ○       |         |         | 15         | 50~100                 | 150~450                | 50                         | 3                      |                          |
| STK-BS/T    | ○       |         |         | ±15        | 200~1500               | 600~2500               | 25                         | 5                      |                          |
| STK-BS/X    | ○       |         |         | ±15        | 500~2500               | 1500~5500              | 25                         | 5                      |                          |
| STK-HD/P    | ○       |         |         | 5, 3.3     | 5~30                   | 10~75                  | 600                        | 1                      |                          |
| STK-HD/Q    | ○       |         |         | 5          | 25~50                  | 30~60                  | 100                        | 1                      |                          |
| SHK-600VBS3 | ○       |         |         | 5          | 600                    | 600                    | 100                        | 3.5                    |                          |
| SHK-VBS6    | ○       |         |         | 5          | 100~1500               | 100~1500               | 40                         | 2                      |                          |
| STB-HA/A3   | ○       |         |         | 15         | 10~20                  | 30~60                  | 150                        | 3                      |                          |
| STK-600/M-M | ○       |         |         | 5, 3.3     | 50, 100                | 50~250                 | 120                        | 4.6                    |                          |
| STK-600/M   | ○       |         |         | 5, 3.3     | 50, 100                | 50~250                 | 120                        | 4.6                    |                          |
| STK-616KML  | ○       |         |         | 5, 3.3     | 40~65                  | 40~65                  | 600                        | 0.9                    |                          |
| STK-616KMF  | ○       |         |         | 5, 3.3     | 40~65                  | 40~65                  | 1000                       | 0.2                    |                          |
| STK-616TML  | ○       |         |         | 5, 3.3     | 40~65                  | 40~65                  | 600                        | 0.9                    |                          |
| STK-616TMF  | ○       |         |         | 5, 3.3     | 40~65                  | 40~65                  | 1500                       | 0.2                    |                          |
| STK-616BML  | ○       |         |         | 5, 3.3     | 12.5~25                | 37.5~75                | 600                        | 0.9                    |                          |
| STK-616DML  | ○       |         |         | 5, 3.3     | 15~65                  | 15~65                  | 600                        | 0.9                    |                          |
| STK-616EML  | ○       |         |         | 5, 3.3     | 20~65                  | 20~65                  | 600                        | 0.9                    |                          |
| STB-CAS/x   | ○       |         |         | 5          | 15~75                  | 51~220                 | 400                        | 0.3                    |                          |
| STB-CAS/F   | ○       |         |         | 5          | 6~75                   | 20~220                 | 400                        | 0.3                    |                          |
| STB-HA/A    | ○       |         |         | ±15        | 50~60                  | 150~180                | 150                        | 1.5                    |                          |
| STB-LA      |         |         | ○       | 12~15      | 100~150                | 200~240                | 150                        | 0.5                    |                          |
| STB-LA/Z    | ○       |         |         | 5          | 100~200                | 300~450                | 300                        | 0.3                    |                          |



UPS Application



— PRODUCT —

|                                                                                                    |                                                                                                 |                                                                                                  |                                                                                                   |                                                                                                    |
|----------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|
| <br>STK-600/M-M | <br>STK-HO/B | <br>STB-BS1   | <br>STB-BS/S1 | <br>STB-BS/H  |
| <br>STB-BS/T    | <br>STK-HD/K | <br>STK-HD/P  | <br>STK-HO    | <br>STK-PL/A  |
| <br>STK-PL/M    | <br>STB-CAS  | <br>STB-CAS/F | <br>STB-HA/A  | <br>STB-HA/Y  |
| <br>STB-LA(N)   | <br>STB-LA/S | <br>STB-LA/D  | <br>STB-LA/Z  | <br>STB-LA/ZN |

© Features

- High precision
- Wide frequency bandwidth
- Fast response time
- Wide detection range

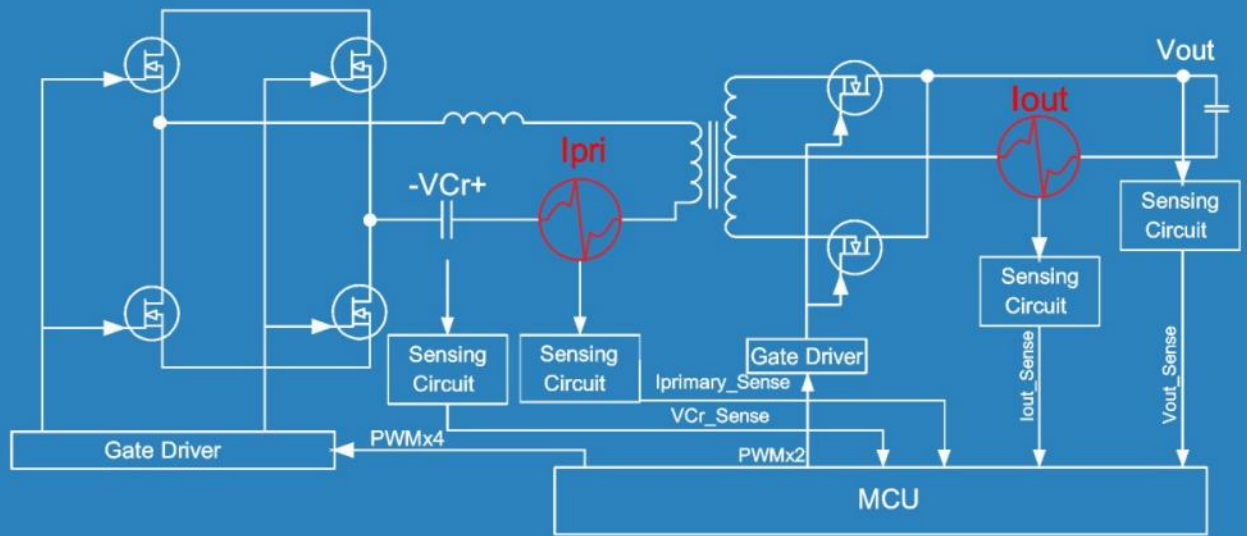
●Electrical parameters

| Product     | Out     |         |         | Vcc<br>(V) | I <sub>pn</sub><br>(A) | I <sub>pm</sub><br>(A) | f <sub>band</sub><br>(kHz) | t <sub>r</sub><br>(μs) | Application |
|-------------|---------|---------|---------|------------|------------------------|------------------------|----------------------------|------------------------|-------------|
|             | Voltage | Digital | Current |            |                        |                        |                            |                        |             |
| STK-600/M-M | ○       |         |         | 5, 3.3     | 50 , 100               | 50~ 250                | 120                        | 4.6                    | UPS         |
| STK-BS1     | ○       |         |         | ±15        | 50~ 600                | 150~ 900               | 50                         | 5                      |             |
| STK-BS/S1   | ○       |         |         | 5          | 50~ 600                | 150~ 1100              | 60                         | 3.5                    |             |
| STK-BS/H    | ○       |         |         | ±15        | 50~ 400                | 150~ 600               | 50                         | 3                      |             |
| STK-BS/T    | ○       |         |         | ±15        | 200~ 1500              | 600~ 2500              | 25                         | 5                      |             |
| STK-HD/K    | ○       |         |         | 5          | 32~ 50                 | 80~ 125                | 600                        | 1                      |             |
| STK-HD/P    | ○       |         |         | 5, 3.3     | 5~ 30                  | 10~ 75                 | 600                        | 1                      |             |
| STK-HO      | ○       |         |         | 5          | 60~ 150                | 150~ 375               | 150                        | 2                      |             |
| STK-PL/A    | ○       |         |         | 5          | 10~ 50                 | 25~ 120                | 400                        | 1.5                    |             |
| STK-PL/M    | ○       |         |         | 5          | 80~ 180                | 250~ 450               | 500                        | 1                      |             |
| STB-CAS/x   | ○       |         |         | 5          | 15~ 75                 | 51~ 220                | 400                        | 0.3                    |             |
| STB-CAS/F   | ○       |         |         | 5          | 6~ 75                  | 20~ 220                | 400                        | 0.3                    |             |
| STB-HA/A    | ○       |         |         | ±15        | 50~ 60                 | 150~ 180               | 150                        | 1.5                    |             |
| STB-HA/Y    | ○       |         |         | ±15        | 50                     | ±150                   | 150                        | 1.5                    |             |
| STB-LA(N)   |         |         | ○       | 12~ 15     | 100~ 150               | 200~ 240               | 150                        | 0.5                    |             |
| STB-LA/S    | ○       |         |         | 5          | 100                    | ±220                   | 300                        | 0.5                    |             |
| STB-LA/D    |         |         | ○       | ±15        | 25~ 100                | 55~ 175                | 150                        | 0.5                    |             |
| STB-LA/Z    | ○       |         |         | 5          | 150~ 200               | 300~ 450               | 300                        | 0.3                    |             |
| STK-HO/B    | ○       |         |         | 5          | 50~ 135                | 120~ 325               | 1000                       | 0.2                    |             |



# High-frequency Current Detection

## — PRODUCT —



STK-616TMF



STK-616KMF



STK-616ZMF



STK-HD/P/G



STK-HD/K/G



STK-HD/SG



STK-600/F



STK-PL/AG



STB-HO/B

### © Features

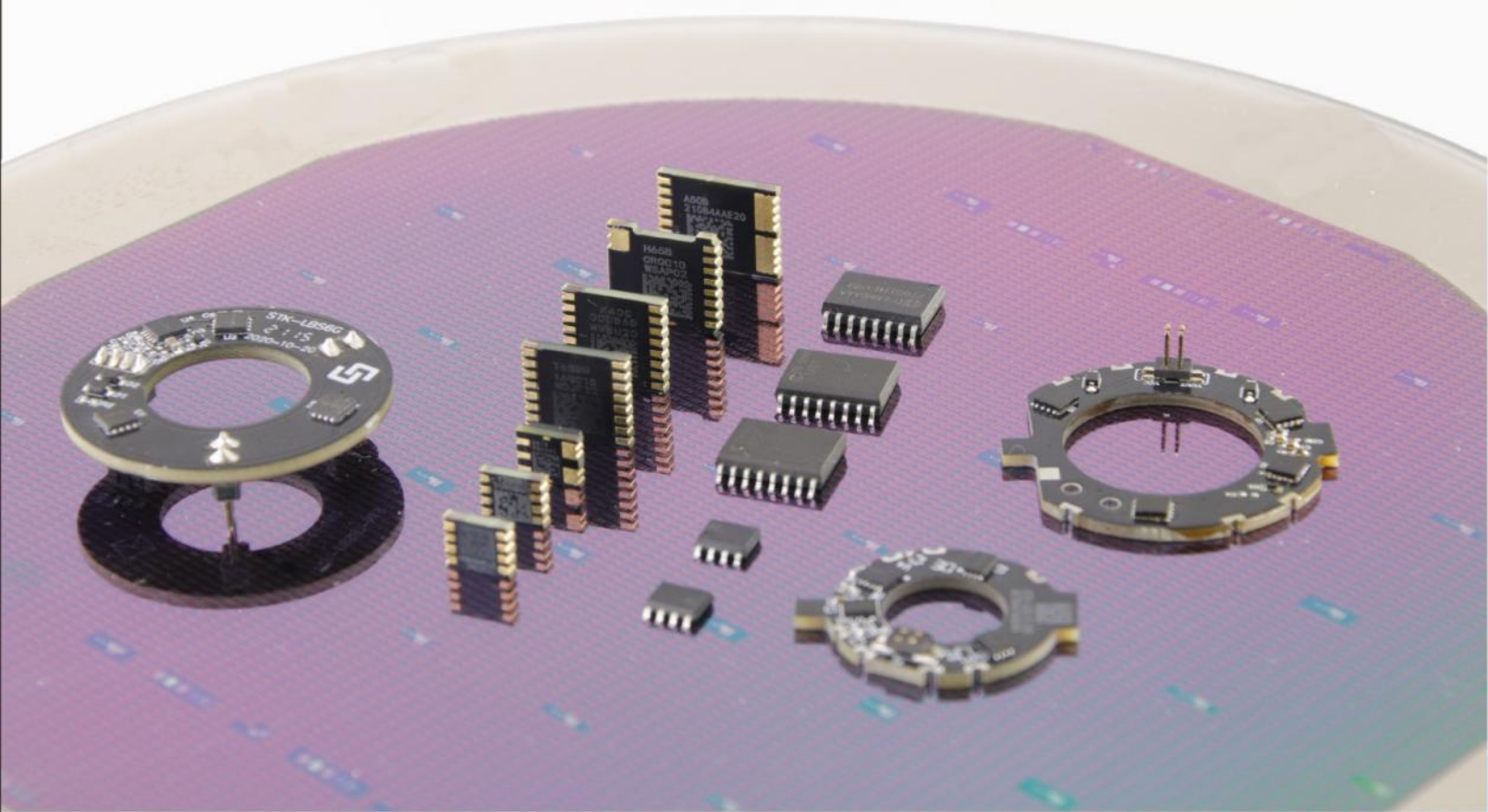
- Very high frequency band width, 2 MHz
- Very fast response time, 50 ns
- Coreless design enables the small dimensions
- OCD (over current detection) function available
- Common-mode field rejection. (core-less design)

### ●Electrical parameters

| Product    | Out    |         |         | Vcc<br>(V) | I <sub>pn</sub><br>(A) | I <sub>pm</sub><br>(A) | f <sub>band</sub><br>(kHz) | t <sub>r</sub><br>(μs) | Acc.<br>(%FS) |
|------------|--------|---------|---------|------------|------------------------|------------------------|----------------------------|------------------------|---------------|
|            | Voltag | Digital | Current |            |                        |                        |                            |                        |               |
| STK-616KMF | ○      |         |         | 3.3        | 40~65                  | 40~65                  | 1000                       | 0.2                    | 3             |
| STK-616ZMF | ○      |         |         | 5          | 20~50                  | 20~50                  | 2000                       | 0.05                   | 3.5           |
| STK-616TMF | ○      |         |         | 5, 3.3     | 40~65                  | 40~65                  | 1500                       | 0.3                    | 3.5           |
| STK-600/F  | ○      |         |         | 5          | 50                     | 200~400                | 1000                       | 0.4                    | 3.5           |
| STK-PL/AG  | ○      |         |         | 5          | 10~50                  | 25~125                 | 800                        | 0.4                    | 2             |
| STK-HD/S/G | ○      |         |         | 5          | 3~10                   | 7.5~25                 | 600                        | 0.4                    | 1.5           |
| STK-HD/K/G | ○      |         |         | 5          | 20~50                  | 50~125                 | 1000                       | 0.4                    | 1.5           |
| STK-HD/P/G | ○      |         |         | 5, 3.3     | 5~30                   | 12.5~75                | 1000                       | 0.4                    | 3             |
| STK-HO/B   | ○      |         |         | 5          | 50~100                 | 125~250                | 1000                       | 0.2                    | 3             |



# Current sensor —— Coreless solution



STK-616TM



STK-616KM



STK-616BM



STK-616DM



STK-616EM



STK-616YM



STK-616ZM



STK-616V



STK-616Y/250B3



STK-LBS/S



STK-LBS/6G



CFS1000

## ◎ Features

- Frequency band width of up to 150 ~ 2000 kHz
- Response time of down to 0.05 ~ 1.5  $\mu$ s
- Open loop design
- Coreless design enables the small dimensions
- Differential magnetic field detection design supports the common-mode field rejection.
- OCD (over current detection) function available
- Support supply voltage of 3.3 V or 5.0 V

## ◎ Application

- Solar energy
- Motor driver
- Uninterruptible power supply
- Switching Mode Power supply
- EV charger
- EV OBC
- EV DC/DC

## ◎Electrical parameters

| Product        | Vcc (V) | I <sub>pn</sub> (A) | I <sub>pm</sub> (A) | f <sub>band</sub> (kHz) | t <sub>r</sub> ( $\mu$ s) | Acc (%FS) |
|----------------|---------|---------------------|---------------------|-------------------------|---------------------------|-----------|
| STK-616V       | 5, 3.3  | 50 ~ 150            | 55 ~ 172            | 150                     | 1.5                       | 3.5       |
| STK-616Y       | 5, 3.3  | 20 ~ 50             | 22 ~ 57.5           | 150                     | 1.5                       | 3.5       |
| STK-616Y/250B3 | 3.3     | 250                 | -50 ~ 300           | 150                     | 1.5                       | 3.5       |
| STK-616KMF     | 3.3     | 40 ~ 65             | 40 ~ 65             | 1000                    | 0.2                       | 3         |
| STK-616ZMF     | 5       | 20 ~ 50             | 20 ~ 50             | 2000                    | 0.05                      | 3.5       |
| STK-616EML     | 5       | 20 ~ 65             | 20 ~ 65             | 600                     | 0.9                       | 3.5       |
| STK-616TML     | 5, 3.3  | 40 ~ 65             | 40 ~ 65             | 600                     | 0.9                       | 3.5       |
| STK-616TMF     | 5, 3.3  | 20 ~ 65             | 20 ~ 65             | 500                     | 0.2                       | 3.5       |
| STK-616YML     | 5, 3.3  | 20 ~ 65             | 20 ~ 65             | 350                     | 1.2                       | 3.5       |
| STK-LBS/6G     | 5       | 100 ~ 1000          | 100 ~ 1000          | 250                     | 3                         | 3.5       |
| STK-LBS/S      | 3.3     | 200                 | 200                 | 250                     | 3                         | 2         |
| STK-616KML     | 5, 3.3  | 40 ~ 65             | 40 ~ 65             | 600                     | 0.9                       | 3         |
| STK-616KMF     | 5, 3.3  | 40 ~ 65             | 40 ~ 65             | 1000                    | 0.2                       | 3         |
| STK-616TML     | 5, 3.3  | 40 ~ 65             | 40 ~ 65             | 600                     | 0.9                       | 3.5       |
| STK-616TMF     | 5, 3.3  | 40 ~ 65             | 40 ~ 65             | 1500                    | 0.2                       | 3.5       |
| STK-616BML     | 5, 3.3  | 12.5 ~ 25           | 37.5 ~ 75           | 600                     | 0.9                       | 3.5       |
| STK-616DML     | 5, 3.3  | 15 ~ 65             | 15 ~ 65             | 600                     | 0.9                       | 3.5       |
| STK-616EML     | 5, 3.3  | 20 ~ 65             | 20 ~ 65             | 600                     | 0.9                       | 3.5       |
| CFS-1000       | 5       | 10 ~ 1000           | 30 ~ 1200           | 500                     | 1                         | 1         |



# Residential Energy Storage Inverter (Single-P)



Small  
size

Low  
cost

Full range  
of products

 Type: Single-P (Energy storage) (Power: 3~10 kw)

| AFCI Function          |                                                                                   |    | MPPT function                                                                      |                              |     |
|------------------------|-----------------------------------------------------------------------------------|----|------------------------------------------------------------------------------------|------------------------------|-----|
| Applied Current Sensor |  |    |  |                              |     |
| PN-01                  | SCT-CTS/P1                                                                        |    | PN-01                                                                              | STK-PL/A                     |     |
|                        |                                                                                   |    | PN-02                                                                              | STK-616TM, STK-616KM         |     |
|                        |                                                                                   |    | PN-03                                                                              | STK-HD/K, STK-HD/P, STK-HD/S |     |
| DCR                    | 0.4 ~ 1.0                                                                         | Ω  | I <sub>PN</sub>                                                                    | 3.0 ~ 65                     | A   |
| Induc. L               | 0.4 ~ 0.5                                                                         | mH | F <sub>band</sub>                                                                  | 150 ~ 1500                   | kHz |
| I <sub>PM</sub>        | 50                                                                                | A  | t <sub>r</sub>                                                                     | 0.2 ~ 2.0                    | μs  |

| AC current             |                                                                                     |     | Residual current                                                                     |                |     |
|------------------------|-------------------------------------------------------------------------------------|-----|--------------------------------------------------------------------------------------|----------------|-----|
| Applied Current Sensor |  |     |  |                |     |
| PN-01                  | STK-PL/A                                                                            |     | PN-01                                                                                | STK-1.0P/M1S-1 |     |
| PN-02                  | STB-CAS/R/F                                                                         |     | PN-02                                                                                | STK-0.3P/M1    |     |
| PN-03                  | STK-HD/K, STK-HD/P, STK-HD/S                                                        |     |                                                                                      |                |     |
| I <sub>PN</sub>        | 3.0 ~ 50                                                                            | A   | I <sub>PN</sub>                                                                      | 0.3, 1         | A   |
| F <sub>band</sub>      | 150 ~ 600                                                                           | kHz | F <sub>band</sub>                                                                    | 0.7            | kHz |
| t <sub>r</sub>         | 0.3 ~ 2.0                                                                           | μs  | t <sub>r</sub>                                                                       | 700.0          | μs  |

| DCDC to Battery        |                                                                                      |     |
|------------------------|--------------------------------------------------------------------------------------|-----|
| Applied Current Sensor |  |     |
| PN-01                  | STK-PL/A                                                                             |     |
| PN-02                  | STK-616TM, STK-616KM                                                                 |     |
| PN-03                  | STK-HD/K, STK-HD/P, STK-HD/S                                                         |     |
| I <sub>PN</sub>        | 3.0 ~ 65                                                                             | A   |
| F <sub>band</sub>      | 150 ~ 1500                                                                           | kHz |
| t <sub>r</sub>         | 0.2 ~ 2.0                                                                            | μs  |

# Residential Energy Storage Inverter (Three-P)



Low  
cost

Small  
size

High  
frequency

 Type: Three-P (Energy storage) (Power: 5-10kw)

| AFCI Function          |                                                                                     |    | String current                                                                      |                        |     |
|------------------------|-------------------------------------------------------------------------------------|----|-------------------------------------------------------------------------------------|------------------------|-----|
| Applied Current Sensor |  |    |  |                        |     |
| PN-01                  | SCT-CTS/P1, SCT-CTS/P2~P5                                                           |    | PN-01                                                                               | STK-CTS/P5, STK-CTS/P6 |     |
| DCR                    | 0.4 ~ 1.0, 0.8 ~ 2                                                                  | Ω  | I <sub>PN</sub>                                                                     | 10 ~ 32                | A   |
| Induc. L               | 0.4 ~ 0.5, 0.53 ~ 0.58                                                              | mH | F <sub>band</sub>                                                                   | 400.0                  | kHz |
| I <sub>PM</sub>        | 50, 150                                                                             | A  | t <sub>r</sub>                                                                      | 1.0                    | μs  |

| MPPT function          |                                                                                       |     | AC current                                                                            |             |     |
|------------------------|---------------------------------------------------------------------------------------|-----|---------------------------------------------------------------------------------------|-------------|-----|
| Applied Current Sensor |  |     |  |             |     |
| PN-01                  | STK-PL/A                                                                              |     | PN-01                                                                                 | STB-CAS/R/F |     |
| PN-02                  | STK-616TM                                                                             |     | PN-02                                                                                 | STK-PL/A    |     |
| PN-03                  | STK-616KM                                                                             |     | PN-03                                                                                 | STK-HD/K    |     |
| PN-04                  | STK-HD/K, STK-HD/P, STK-HD/S                                                          |     |                                                                                       |             |     |
| I <sub>PN</sub>        | 3.0 ~ 65                                                                              | A   | I <sub>PN</sub>                                                                       | 10 ~ 50     | A   |
| F <sub>band</sub>      | 150 ~ 1500                                                                            | kHz | F <sub>band</sub>                                                                     | 400 ~ 600   | kHz |
| t <sub>r</sub>         | 0.2 ~ 2.0                                                                             | μs  | t <sub>r</sub>                                                                        | 0.3 ~ 1.5   | μs  |

| Residual current       |                                                                                       |     | AC (load)                                                                             |                    |     |
|------------------------|---------------------------------------------------------------------------------------|-----|---------------------------------------------------------------------------------------|--------------------|-----|
| Applied Current Sensor |  |     |  |                    |     |
| PN-01                  | SFG-0.3P/S2                                                                           |     | PN-01                                                                                 | STB-CAS/R/K        |     |
|                        |                                                                                       |     | PN-02                                                                                 | STK-PL/A           |     |
|                        |                                                                                       |     |                                                                                       | STK-HD/K, STK-HD/P |     |
| I <sub>PN</sub>        | 0.3                                                                                   | A   | I <sub>PN</sub>                                                                       | 5 ~ 75             | A   |
| F <sub>band</sub>      | 0.7                                                                                   | kHz | F <sub>band</sub>                                                                     | 400 ~ 600          | kHz |
| t <sub>r</sub>         | 700.0                                                                                 | μs  | t <sub>r</sub>                                                                        | 0.3 ~ 1.5          | μs  |



# 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 |            |     | Applied Current Sensor |                      |     |
| 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 <sub>pn</sub>        | 20 ~ 65    | A   | I <sub>pn</sub>        | 5.0 ~ 50             | A   |
| I <sub>pm</sub>        | NA         | A   | I <sub>pm</sub>        | 10 ~ 125             | A   |
| F <sub>band</sub>      | 600 ~ 1500 | KHZ | F <sub>band</sub>      | 600 ~ 1000           | KHZ |
| t <sub>r</sub>         | 0.2 ~ 0.9  | μs  | t <sub>r</sub>         | 1.0                  | μs  |
| Acc.                   | 3.0 ~ 3.5  | %FS | Acc.                   | 1.5 ~ 3.0            | %FS |

| Charging pile module   |           |     | Charging pile module   |             |     |
|------------------------|-----------|-----|------------------------|-------------|-----|
| Applied Current Sensor |           |     | Applied Current Sensor |             |     |
| 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 <sub>pn</sub>        | 15 ~ 75   | A   | I <sub>pn</sub>        | 6 ~ 75      | A   |
| I <sub>pm</sub>        | 51 ~ 220  | A   | I <sub>pm</sub>        | 20 ~ 220    | A   |
| F <sub>band</sub>      | 400       | KHZ | F <sub>band</sub>      | 400         | KHZ |
| t <sub>r</sub>         | 0.3       | μs  | t <sub>r</sub>         | 0.3         | μs  |
| Acc.                   | 1.1 ~ 3.0 | %FS | Acc.                   | 1.1 ~ 3.0   | %FS |

| Charging pile module   |            |     | Charging pile module   |           |     |
|------------------------|------------|-----|------------------------|-----------|-----|
| Applied Current Sensor |            |     | Applied Current Sensor |           |     |
| 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 <sub>pn</sub>        | 10 ~ 180   | A   | I <sub>pn</sub>        | 60 ~ 120  | A   |
| I <sub>pm</sub>        | 25 ~ 450   | A   | I <sub>pm</sub>        | 150 ~ 375 | A   |
| F <sub>band</sub>      | 400 ~ 1000 | KHZ | F <sub>band</sub>      | 150       | KHZ |
| t <sub>r</sub>         | 0.2 ~ 1.5  | μs  | t <sub>r</sub>         | 2.0       | μs  |
| Acc.                   | 2.0        | %FS | Acc.                   | 3.0       | %FS |

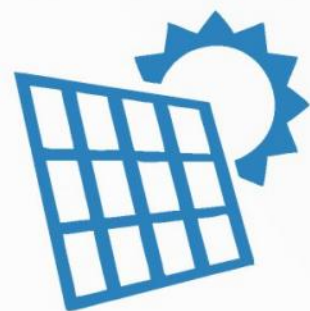
| Charging pile module   |             |     | Charging pile module   |           |     |
|------------------------|-------------|-----|------------------------|-----------|-----|
| Applied Current Sensor |             |     | Applied Current Sensor |           |     |
| PN-01                  | STK-600/M   |     | 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 <sub>pn</sub>        | 50, 100     | A   | I <sub>pn</sub>        | 50        | A   |
| I <sub>pm</sub>        | 50 ~ 400    | A   | I <sub>pm</sub>        | 200 ~ 400 | A   |
| F <sub>band</sub>      | 120         | KHZ | F <sub>band</sub>      | 1000      | KHZ |
| t <sub>r</sub>         | 4.6         | μs  | t <sub>r</sub>         | 0.4       | μs  |
| Acc.                   | 3.5         | %FS | Acc.                   | 3.5       | %FS |

| Residual current       |                  |        | Residual current       |                 |        |
|------------------------|------------------|--------|------------------------|-----------------|--------|
| Applied Current Sensor |                  |        | Applied Current Sensor |                 |        |
| PN-01                  | SFG-CPL/A series |        | PN-01                  | SFG-CPL/B       |        |
| I <sub>pm</sub>        | 300              | mA     | I <sub>pm</sub>        | 300             | mA     |
| I <sub>pn1</sub>       | 6                | mA DC  | I <sub>pn1</sub>       | 6               | mA DC  |
| I <sub>pn2</sub>       | 10, 30           | mA rms | I <sub>pn2</sub>       | 30              | mA rms |
| F <sub>band</sub>      | 2.0              | KHZ    | F <sub>band</sub>      | 2.0             | KHZ    |
| t <sub>r</sub>         | Follow IEC62752  |        | t <sub>r</sub>         | Follow IEC62752 |        |





# PV Micro-inverter



Low  
cost

Small  
size

High  
frequency



Type: Micro-inverter (Power: 0.5 ~ 2 kw )

| AFCI Function                |                                                                                   |          | MPPT function                                                                                                                                                         |            |         |
|------------------------------|-----------------------------------------------------------------------------------|----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|---------|
| Applied<br>Current<br>Sensor |  |          |   |            |         |
| PN-01                        | SCT-CTS/P1                                                                        |          | PN-01                                                                                                                                                                 | STK-616YM  |         |
|                              |                                                                                   |          | PN-02                                                                                                                                                                 | STK-HD/SG  |         |
| DCR                          | 0.4 ~ 1.0                                                                         | $\Omega$ | I <sub>PN</sub>                                                                                                                                                       | 3.0 ~ 50   | A       |
| Induc. L                     | 0.4 ~ 0.5                                                                         | mH       | F <sub>band</sub>                                                                                                                                                     | 400 ~ 1600 | kHz     |
| I <sub>PM</sub>              | 50                                                                                | A        | t <sub>r</sub>                                                                                                                                                        | 0.2 ~ 1.0  | $\mu$ s |

| AC current                   |                                                                                                                                                                          |         |
|------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| Applied<br>Current<br>Sensor |   |         |
| PN-01                        | STK-616TM                                                                                                                                                                |         |
| PN-02                        | STK-616KM                                                                                                                                                                |         |
| PN-03                        | STK-HD/SG                                                                                                                                                                |         |
| I <sub>PN</sub>              | 3.0 ~ 65                                                                                                                                                                 | A       |
| F <sub>band</sub>            | 600 ~ 1500                                                                                                                                                               | kHz     |
| t <sub>r</sub>               | 0.2 ~ 0.9                                                                                                                                                                | $\mu$ s |

