# Solis-(80-110)K-5G

Solis Three Phase Inverters





# >> Models:

Solis-80K-5G

Solis-100K-HV-5G

Solis-110K-BHV-5G



#### Efficient

- 9/10 MPPTs, max. efficiency 98.8%
- > 150% DC/AC ratio
- Compatible with bifacial modules

## **Smart**

- Night SVG function
- Intelligent string monitoring, smart I-V curve scan
- Remote firmware upgrade with simple operation

#### Safe

- IP66
- Built-in PID recovery for better module performance (optional)
- AFCI protection, proactively reduces fire risk
- Globally recognised branded componentry for longer life

### **Economic**

- Power line communication (PLC) (optional)
- DC side supports "Y" connector
- Supports aluminium wire access to reduce cost

# DATASHEET Solis-(80-110)K-5G

| Mac Injust voltage   | Models   | 80K                                    | 100K-HV       | 110K-BHV    |  |
|--|--|--|---------------|-------------|--|
| Manage   195   | Input DC   |  |               |             |  |
| Start up voltage   | Max. input voltage   | 1100 V                                 |               |             |  |
| MePF voltage range   | Rated voltage  | 600 V                                  |               | 720 V       |  |
| Max in the current 92A 102A 102A   | Start-up voltage   |  | 195 V         |             |  |
| Max. short circuit current 9*40 A 10*40 A  MPPT number/Max. input enings number 9/18 10/20  Toutput AC  Value of the process o | MPPT voltage range   |  | 180-1000 V    |             |  |
| MPRT number/Nax, input strings number  | Max. input current   | 9*26 A                                 |               | 10*26 A     |  |
| Output AC         Bit Refer to Output prover         Bit May         100 MW         110 MW           Max. Exparent Output prover         88 MW         110 kW         121 kW           Max. Output prover         88 MW         110 kW         121 kW           Max. Output Control         50 Hz / 200 Mz         3 PF, 480 V           Rand grid output current         121.8 A / 115.9 A         120.3 A         117.6 A           Max. Output Current         133.7 A         120.3 A         117.6 A           Power factor         >0.00 (0.8 leading - 0.8 leaging)         117.6 A           Max. efficiency         9K.76         9K.76         120.4 A           De Unfliciency         9K.876         9K.76         120.4 A           Unfliciency         9K.876         9K.76         120.5 A         120.4 A           Proceedion         Ves         9K.76   | Max. short circuit current   | 9*40 A                                 | 10*40 A       |             |  |
| Rated output power   | MPPT number/Max. input strings number  | 9/18                                   |               | 10/20       |  |
| Max. apparent output power   | Output AC  |  |               |             |  |
| Mass output power         88 kW         110 kW         121 kW           Rated grid routput voltage         3/N/PE, 220 Y 380 Y, 230 Y 400 V         3/PE, 480 V         3/PE, 490 V           Rated grid routput current         121,6 / 115.5 /h         120,3 /h         117,6 /h           Max. output current         133,7 /h         120,3 /h         117,6 /h           Max. output current         133,7 /h         120,3 /h         117,6 /h           Max. output current         133,7 /h         120,3 /h         129,4 /h           Power factor         >0.99 (0.8 leading.) .08 leaging.)         129,4 /h           Efficiency         98,7%         98,8%         120,3 /h           Max. efficiency         98,8%         98,8%         120,3 /h         120,3 /h         120,4 /h   | Rated output power   | 80 kW                                  | 100 kW        | 110 kW      |  |
| Rated grid voltage  3/N/PC, 220 V / 380 N, 230 V / 480 V  3/PC, 480 V  | Max. apparent output power   | 88 kVA                                 | 110 kVA       | 121 kVA     |  |
| Rated grid frequency  Rated grid frequency  Rated grid fourput current  125.6 / 115.5 A  120.3 A  127.6 A  129.4 A  129.3 A  129.4 A  129.4 A  129.3 A  129.4 A  129.4 A  129.5 A  129.4 A  129.5 A  129.6 Reading - 0.8 legging    Filtidicancy  Max. efficiency  98.7% 98.8% 98.8%  120.6 Reading - 0.8 legging    Filtidicancy  98.7% 98.8% 98.8% 98.8%  120.6 Reading - 0.8 legging    Filtidicancy  98.7% 98.8% 98.8% 98.8%  120.6 Reading - 0.8 legging    Filtidicancy  98.7% 98.8% 98.8% 98.8% 98.8% 98.8%  120.6 Reading - 0.8 legging    Filtidicancy  98.8%   | Max. output power  | 88 kW                                  | 110 kW        | 121 kW      |  |
| Rated grid output current   121.6 A / 115.5 A   120.3 A   117.6 A  | Rated grid voltage   | 3/N/PE, 220 V / 380 V, 230 V / 400 V   | 3/PE, 480 V   | 3/PE, 540 V |  |
| Rated grid output current   121.6 A / 115.5 A   120.3 A   117.6 A  |  |  | 50 Hz / 60 Hz |             |  |
| Max. output current 133.7 A 132.3 A 129.4 A Power factor   |  | 121.6 A / 115.5 A                      | 120.3 A       | 117.6 A     |  |
| Power factor   | Max. output current  |  |               |             |  |
| ### THIS   ### SAME  | Power factor   |  |               |             |  |
| Efficiency         98.7%         98.8%           Max. efficiency         98.3%         98.8%           Le efficiency         98.3%         98.5%           Protection         Ves           DC reverse polarity protection         Yes           Output over current protection         Yes           Surge protection         DC Type II / AC Type II           Grid monitoring         Yes           Anti-islanding protection         Yes           Temperature protection         Yes           Strings monitoring         Yes           IV Curve scanning         Yes           Integrated PID recovery         Optional           Integrated DC switch         Yes           Integrated DC switch         Yes           Integrated DC switch         Yes           Opinional         General Data           Dimensions (WHTD)         1050°567°314.5 mm (with AC switch)           Weight         32 kg           Topology         Transformerless           Selectorsumption (right)         42 W           Operating ambient temperature range         -30 +60°C           Relative humidity         0.100%           Ingress protection         Intelligent redundant fan-cooling <th< td=""><td></td><td colspan="3"></td></th<>   |  |  |               |             |  |
| Max. efficiency         98.7%         98.8%           Eu efficiency         98.3%         98.5%           Protection         Yes           Short circuit protection         Yes           Short circuit protection         Yes           Surger protection         Yes           Surger protection         Yes           Surger protection         Yes           Strings monitoring         Yes           Anti-Islanding protection         Yes           Strings monitoring         Yes           Integrated PID recovery         Optional           Integrated PID recovery         Optional           Integrated ACF (IOC are fault circuit protection)         Yes           Integrated ACF (IOC are fault circuit protection)         Yes           Unitegrated ACF (IOC are fault circuit protection)         Yes           Integrated ACF (IOC are fault circuit protection)         Yes           Integrated ACF (IOC are fault circuit protection)         Yes           Unitegrated ACF (IOC are fault circuit protection)         Yes           Integrated ACF (IOC are fault circuit protection)         Yes           Integrated ACF (IOC are fault circuit protection)         Yes           Unitegrated ACF (IOC are fault circuit protection)         Yes <th< td=""><td></td><td></td><td></td><td></td></th<>  |  |  |               |             |  |
| Protection   |  | 98.7%                                  |               | 98.8%       |  |
| Protection         Yes           DC reverse-polarity protection         Yes           Short circuit protection         Yes           Output over current protection         Yes           Surge protection         DC Type II /AC Type II           Grid monitoring         Yes           Anti-Islanding protection         Yes           Temperature protection         Yes           Strings monitoring         Yes           Integrated APC (IPC acresist protection)         Yes           Integrated APC (IPC acresist)         Yes </td <td>-</td> <td></td> <td></td> <td></td>   | -  |  |               |             |  |
| DC reverse-polarity protection Yes Output over current protection Yes Surge protection DC Type II / AC Type II Grid monitoring Yes Anti-Islanding protection Yes Strings monitoring Yes Anti-Islanding protection Yes Strings monitoring Yes Strings monitoring Yes Integrated PID recovery Optional Integrated PID recovery Optional Integrated DC switch Yes Integrated DC switch Yes Integrated DC switch Optional Op |  | 30.370                                 |               | 30.370      |  |
| Short circuit protection Yes  Surge protection DC Type II AC Type II  Grid monitoring Yes  Anti-slanding protection Yes  Anti-slanding protection Yes  Anti-slanding protection Yes  Temperature protection Yes  Strings monitoring Yes  Integrated PD recovery Optional  Integrated DC switch Yes  Integrated DC switch Yes  Integrated DC switch Yes  Integrated DC switch Yes  Dimensions (W'H'D) 1050*567*314.5 mm (with AC switch)  Weight 82 kg  Topology Transformerless  Self-consumption (night) -2 W  Operating ambient temperature range 3-30 -460°C  Relative humidity 0-100%  Integrated protection Intelligent redundant flan-cooling Ama, operation altitude 4000 m  Grid connection standard G98 or G99, VDE-AR-N-14105 / VDE VOIZ4, EN 50549-1, VDE 0126 / UTE C 15 / VFR-2019, CEI-0-21, CID/11, NRS 097-2-1, TOR, EIFS 2018.2, IEC 62116, IEC 61727, IEC 60068, IEC 61683, EN 50530  Safety,EMC standard IEC/EN 62109-1/-2, IEC/EN 61000-6-2/-4  Features  OD connection MC4 connector  AC connection OT terminal (max. 185 mm*)  Display LCD   |  |  | Vos           |             |  |
| Output over current protection         Yes           Surge protection         DC Type II /AC Type II           Grid monitoring         Yes           Anti-Islanding protection         Yes           Temperature protection         Yes           Strings monitoring         Yes           Integrated PID recovery         Optional           Integrated PID recovery         Optional           Integrated AC (I) Care-fault circuit protection)         Yes           Integrated AC switch         Optional           General Data         Optional           Dimensions (M*H*D)         1050*567*314.5 mm (with AC switch)           Weight         82 kg           Topology         Transformerless           Self-consumption (night)         < W           Operating ambient temperature range         30 ~ 460*C           Relative humidity         0.100%           Ingress protection         IP66           Cooling concept         Intelligent redundant fan-cooling           Max. operation altitude         4000 m           Grid connection standard         G98 or G99, VIDE-AR-N 4105 / VDE VO124, EN 5059-1, VDE 0126 / UTE C.15 / VFR.2019, CE10-21, C10/11, NRS.097-2-1, TOR, EIFS 2018.2, IEC 62116, IEC 61727, IEC 60068, IEC 61683, EN 50530           Safety/EMC standard         IEC/EM 62109-1//2, I  |  |  |               |             |  |
| Surge protection DC Type II / AC Type II Grid monitoring Yes Anti-slanding protection Yes Strings monitoring Yes Strings monitoring Yes Integrated PID recovery Optional Integrated PID recovery Optional Integrated DC switch Yes Integrated DC switch Yes Integrated DC switch Optional Integrated Scanding Yes Integrated DC switch Optional  |  |  |               |             |  |
| Grid monitoring Yes Anti-Islanding protection Yes Temperature protection Yes Strings monitoring Yes Integrated PID recovery Yes Integrated PID recovery Optional Integrated AFCI (DC arc-fault circuit protection) Yes Integrated AFCI (DC arc-fault circuit protection) Integrated AFCI (DC arc-fault circuit protect |  |  |               |             |  |
| Anti-islanding protection  Temperature protection  Yes  Strings monitoring  Yes  Integrated PID recovery  Optional  Integrated PID recovery  Integrated AFCI (DC arc-fault circuit protection)  Integrated AC switch  Optional  General Data  Dimensions (W*H*D)  Integrated AC switch  Optional  Integrated AC switch  Integrat |  |  |               |             |  |
| Temperature protection Yes Strings monitoring Yes I/V Curve scanning Yes Integrated PID recovery Optional Integrated PID recovery Optional Integrated DC switch Yes Integrated CS witch Optional Integrated CS witch Optional Integrated CS witch Optional Integrated String | The state of the s |  |               |             |  |
| Strings monitoring Yes  I/V Curve scanning Yes  Integrated PID recovery Optional  Integrated AFCI (DC arc-fault circuit protection)  Integrated AC (DC arc-fault circuit protection)  Integrated AC switch Yes  Integrated AC switch Optional  General Data  Dimensions (W'H'D) 1050*567*314.5 mm (with AC switch)  Weight 82 kg  Topology Transformerless  Self-consumption (night) <2 W  Operating ambient temperature range 30 - +60°C  Relative humidity 0-100%  Ingress protection 1966  Cooling concept Intelligent redundant fan-cooling  Max. operation altitude 4000 m  Grid connection standard 698 or 699, VDE-AR-N 4105 /VDE V 0124, EN 50549-1, VDE 0126 / UTE C 15 /VFR-2019, CEI 0-21, CI0/11, NRS 097-2-1, TOR, EIFS 2018.2, IEC 62116, IEC 61727, IEC 60068, IEC 61683, EN 50530  Safety/EMC standard IEC/EN 62109-1/-2, IEC/EN 61000-6-2/-4  Features  DC connection MC4 connector  AC connection OT terminal (max. 185 mm²)  Display LCD  |  |  |               |             |  |
| Integrated PID recovery Integrated AFCI (DC arc-fault circuit protection) Integrated AFCI (DC arc-fault circuit protection) Integrated AFCI (DC arc-fault circuit protection) Integrated AC switch Int |  |  |               |             |  |
| Integrated PID recovery  Integrated AFCI (DC arc-fault circuit protection)  Integrated AFCI (DC arc-fault circuit protection)  Integrated DC switch  Yes  Integrated AC switch  Optional  General Data  Dimensions (W*H*D)  I 1050*567*314.5 mm (with AC switch)  Weight  82 kg  Topology  Transformerless  Self-consumption (night)  2 W Operating ambient temperature range  Pief6  Cooling concept  Intelligent redundant fan-cooling  Max. operation altitude  Grid connection standard  G98 or G99, VDE-AR-N 14105 / VDE V 0124, EN 50549-1, VDE 0126 / UTE C 15 / VFR-2019, CEI 0-21, C10/11, NRS 097-2-1, TOR, EIFS 2018-2, IEC 62116, IEC 61727, IEC 60068, IEC 61683, EN 50530  Safety/EMC standard  Features  DC connection  AC connection  OT terminal (max. 185 mm²)  Display  LCD   |  |  |               |             |  |
| Integrated AFCI (DC arc-fault circuit protection) Integrated DC switch Integrated AC switch Optional General Data Dimensions (W*H*D) Integrated AC switch Optional General Data Dimensions (W*H*D) Integrated AC switch Optional General Data Dimensions (W*H*D) Integrated AC switch Optional Salk Salk Topology Transformerless Self-consumption (night) Integrated AC switch Operating ambient temperature range Integrated AC switch Operating AC switch Operating ambient temperature range Integrated AC switch Operating AC |  |  |               |             |  |
| Integrated DC switch  Integrated AC switch Optional  General Data  Dimensions (W*H*D) Integrated AC switch Optional  Self-consumption (night) Operating ambient temperature range Relative humidity Ingress protection Cooling concept Intelligent redundant fan-cooling Max. operation altitude  G98 or G99, VDE-AR-N 4105 / VDE V 0124, EN 50549-1, VDE 0126 / UTE C 15 / VFR:2019, CE10-21, C10/11, NRS 097-2-1, TOR, EIFS 2018-2, IEC 62116, IEC 61727, IEC 60068, IEC 61683, EN 50530  Safety/EMC standard EC/EN 62109-1/-2, IEC/EN 61000-6-2/-4  Features DC connection AC connection AC connection AC connection AC connection Display  LCD   |  |  |               |             |  |
| Integrated AC switch  General Data  Dimensions (W*H*D)  Weight  Base kg  Topology  Transformerless  Self-consumption (night)  Operating ambient temperature range  Relative humidity  Ingress protection  Cooling concept  Max. operation altitude  Gid connection standard  Gas or G99, VDE-AR-N 4105 / VDE V 0124, EN 50549-1, VDE 0126 / UTE C 15 / VFR:2019, CEI 0-21, C10/11, NRS 097-2-1, TOR, EIFS 2018.2, IEC 62116, IEC 61727, IEC 60068, IEC 61683, EN 50530  Safety/EMC standard  Features  DC connection  AC connection  AC connection  AC connection  Display  DC Terminal (max. 185 mm²)  LCD  |  |  |               |             |  |
| General Data  Dimensions (W*H*D)  1050*567*314.5 mm (with AC switch)  Weight  82 kg  Topology  Transformerless  Self-consumption (night)  Querating ambient temperature range  -30 ~ +60°C  Relative humidity  0-100%  Ingress protection  IP66  Cooling concept  Intelligent redundant fan-cooling  Max. operation altitude  4000 m  Grid connection standard  G98 or G99, VDE-AR-N 4105 / VDE V 0124, EN 50549-1, VDE 0126 / UTE C 15 / VFR:2019, CEI 0-21, C10/11, NRS 097-2-1, TOR, EIFS 2018.2, IEC 62116, IEC 61727, IEC 60068, IEC 61683, EN 50530  Safety/EMC standard  IEC/EN 62109-1/-2, IEC/EN 61000-6-2/-4  Features  DC connection  MC4 connector  AC connection  OT terminal (max. 185 mm²)  Display  LCD  | *  |  |               |             |  |
| Dimensions (W'H'D)  1050*567*314.5 mm (with AC switch)  82 kg  Topology  Transformerless  Self-consumption (night)  <2 W  Operating ambient temperature range  -30 ~ +60°C  Relative humidity  0-100%  Ingress protection  IP66  Cooling concept  Intelligent redundant fan-cooling  Max. operation altitude  4000 m  Grid connection standard  G98 or G99, VDE-AR-N 4105 / VDE V 0124, EN 50549-1, VDE 0126 / UTE C 15 / VFR:2019, CEI 0-21, C10/11, NRS 097-2-1, TOR, EIFS 2018.2, IEC 62116, IEC 61727, IEC 60068, IEC 61683, EN 50530  Safety/EMC standard  Features  DC connection  MC4 connector  AC connection  OT terminal (max. 185 mm²)  Display  LCD  | -  | Uptional                               |               |             |  |
| Weight 82 kg Topology Transformerless  Self-consumption (night) <2 W Operating ambient temperature range -30 ~ +60 °C Relative humidity 0-100% Ingress protection IP66 Cooling concept Intelligent redundant fan-cooling Max. operation altitude 4000 m  Grid connection standard G98 or G99, VDE-AR-N 4105 / VDE V 0124, EN 50549-1, VDE 0126 / UTE C 15 / VFR:2019, CEI 0-21, C10/11, NRS 097-2-1, TOR, EIFS 2018.2, IEC 62116, IEC 61727, IEC 60068, IEC 61683, EN 50530  Safety/EMC standard IEC/EN 62109-1/-2, IEC/EN 61000-6-2/-4  Features  DC connection MC4 connector  AC connection OT terminal (max. 185 mm²) Display  LCD  |  |  |               |             |  |
| Topology Transformerless  Self-consumption (night)  Querating ambient temperature range -30 ~ +60°C  Relative humidity 0-100%  Ingress protection IP66  Cooling concept Intelligent redundant fan-cooling  Max. operation altitude 4000 m  Grid connection standard Grid connection standard Grid connection standard Grid connection standard Safety/EMC standard Features DC connection MC4 connector AC connection Display  Transformerless  -2 W  -2 W  -2 W  -30 ~ +60°C  -40 ~ +60° |  |  |               |             |  |
| Self-consumption (night)  Operating ambient temperature range Relative humidity  O-100%  Ingress protection  IP66  Cooling concept  Max. operation altitude  Grid connection standard  G98 or G99, VDE-AR-N 4105 / VDE V 0124, EN 50549-1, VDE 0126 / UTE C 15 / VFR:2019, CEI 0-21, C10/11, NRS 097-2-1, TOR, EIFS 2018.2, IEC 62116, IEC 61727, IEC 60068, IEC 61683, EN 50530  Safety/EMC standard  Features  DC connection  AC connection  AC connection  OT terminal (max. 185 mm²)  LCD  |  | -                                      |               |             |  |
| Operating ambient temperature range  Relative humidity  O-100%  Ingress protection  IP66  Cooling concept  Intelligent redundant fan-cooling  Max. operation altitude  4000 m  Grid connection standard  G98 or G99, VDE-AR-N 4105 / VDE V 0124, EN 50549-1, VDE 0126 / UTE C 15 / VFR:2019, CEI 0-21, C10/11, NRS 097-2-1, TOR, EIFS 2018.2, IEC 62116, IEC 61727, IEC 60068, IEC 61683, EN 50530  Safety/EMC standard  Features  DC connection  AC connection  AC connection  OT terminal (max. 185 mm²)  Display  LCD   |  |  |               |             |  |
| Relative humidity  Ingress protection  Cooling concept  Intelligent redundant fan-cooling  Max. operation altitude  Grid connection standard  G98 or G99, VDE-AR-N 4105 / VDE V 0124, EN 50549-1, VDE 0126 / UTE C 15 / VFR:2019, CEI 0-21, C10/11, NRS 097-2-1, TOR, EIFS 2018.2, IEC 62116, IEC 61727, IEC 60068, IEC 61683, EN 50530  Safety/EMC standard  Features  DC connection  MC4 connector  AC connection  OT terminal (max. 185 mm²)  Display  LCD  |  |  |               |             |  |
| Ingress protection  Cooling concept  Intelligent redundant fan-cooling  Max. operation altitude  Grid connection standard  G98 or G99, VDE-AR-N 4105 / VDE V 0124, EN 50549-1, VDE 0126 / UTE C 15 / VFR:2019, CEI 0-21, C10/11, NRS 097-2-1, TOR, EIFS 2018.2, IEC 62116, IEC 61727, IEC 60068, IEC 61683, EN 50530  Safety/EMC standard  IEC/EN 62109-1/-2, IEC/EN 61000-6-2/-4  Features  DC connection  MC4 connector  AC connection  OT terminal (max. 185 mm²)  Display  LCD   | Operating ambient temperature range  |  |               |             |  |
| Cooling concept  Max. operation altitude  Grid connection standard  Safety/EMC standard  DC connection  AC connection  AC connection  Cooling concept  Intelligent redundant fan-cooling  4000 m  4000 m  G98 or G99, VDE-AR-N 4105 / VDE V 0124, EN 50549-1, VDE 0126 / UTE C 15 / VFR:2019, CEI 0-21, C10/11, NRS 097-2-1, TOR, EIFS 2018.2, IEC 62116, IEC 61727, IEC 60068, IEC 61683, EN 50530  IEC/EN 62109-1/-2, IEC/EN 61000-6-2/-4  Features  DC connection  MC4 connector  AC connection  OT terminal (max. 185 mm²)  DIsplay  LCD   | Relative humidity  |  |               |             |  |
| Max. operation altitude       4000 m         Grid connection standard       G98 or G99, VDE-AR-N 4105 / VDE V 0124, EN 50549-1, VDE 0126 / UTE C 15 / VFR:2019, CEI 0-21, C10/11, NRS 097-2-1, TOR, EIFS 2018.2, IEC 62116, IEC 61727, IEC 60068, IEC 61683, EN 50530         Safety/EMC standard       IEC/EN 62109-1/-2, IEC/EN 61000-6-2/-4         Features       DC connection         AC connection       MC4 connector         AC connection       OT terminal (max. 185 mm²)         Display       LCD   | Ingress protection   |  |               |             |  |
| G98 or G99, VDE-AR-N 4105 / VDE V 0124, EN 50549-1, VDE 0126 / UTE C 15 / VFR:2019, CEI 0-21, C10/11, NRS 097-2-1, TOR, EIFS 2018.2, IEC 62116, IEC 61727, IEC 60068, IEC 61683, EN 50530  Safety/EMC standard  IEC/EN 62109-1/-2, IEC/EN 61000-6-2/-4  Features  DC connection  MC4 connector  AC connection  OT terminal (max. 185 mm²)  LCD   | Cooling concept  |  |               |             |  |
| NRS 097-2-1, TOR, EIFS 2018.2, IEC 62116, IEC 61727, IEC 60068, IEC 61683, EN 50530  Safety/EMC standard  Features  DC connection  AC connection  OT terminal (max. 185 mm²)  LCD  | Max. operation altitude  |  |               |             |  |
| Features  DC connection MC4 connector  AC connection OT terminal (max. 185 mm²)  Display LCD   | Grid connection standard   |  |               |             |  |
| DC connection MC4 connector  AC connection OT terminal (max. 185 mm²)  Display LCD   | Safety/EMC standard  | IEC/EN 62109-1/-2, IEC/EN 61000-6-2/-4 |               |             |  |
| AC connection OT terminal (max. 185 mm²) Display LCD   | Features   |  |               |             |  |
| Display LCD  | DC connection  | MC4 connector                          |               |             |  |
|  | AC connection  | OT terminal (max. 185 mm²)             |               |             |  |
| Communication RS485, Optional: Wi-Fi, GPRS, PLC  | Display  | LCD                                    |               |             |  |
|  | Communication  | RS485, Optional: Wi-Fi, GPRS, PLC      |               |             |  |