

THE POWER OF ASTROENERGY



PV GRID-CONNECTED INVERTER

A **CHNT** COMPANY



With world-class components suppliers

Astronergy chooses world-class suppliers to ensure the high quality of its products. With top-class partners Astronergy provides inverters with high quality and efficiency to the whole world.

Mos IGBT



IC



Fuse

Capacitor



Current Transducer

Relay



Diode

MCU



Certification



VDE0126

G59

G83

VDE-AR-N4105

CEI 0-21

RD1663

IEC62109

EN50438

Three phase inverter

CHPI 10KTL/12KTL/18KTL/20KTL

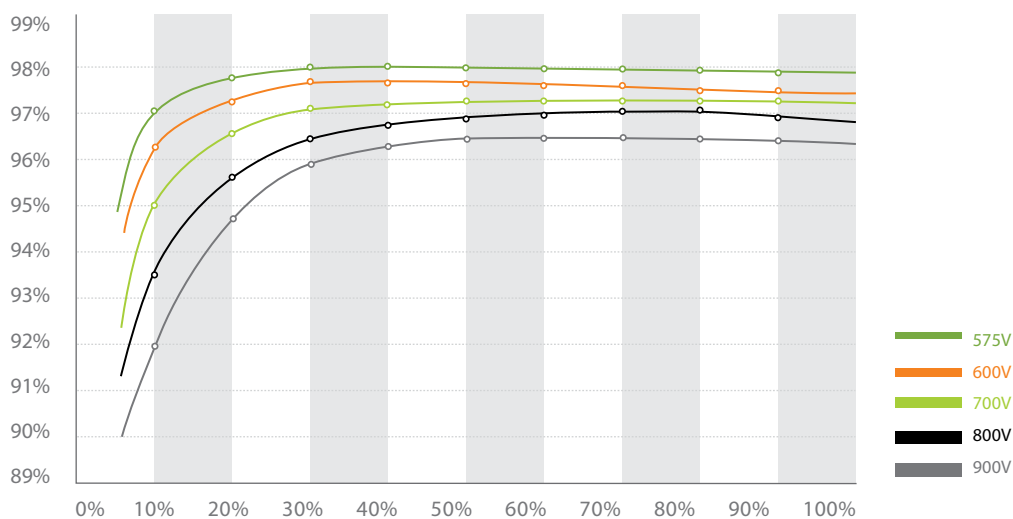
Leading - edge Technology

- DC input voltage up to 1000V
- Maximum efficiency of 98%
- Internal DC switch
- Transformerless
- Compact design
- Multi MPP controller
- MTL - String
- Bluetooth / RF technology / Wi-Fi
- Sound control
- Easy installation
- Comprehensive Astronergy warranty program

Europe ENS

- Simple national setting of line supply monitoring(ENS)
- Easy country configuration
- Multi - language display
- Currently available for Germany, France, UK, Switzerland and Spain etc.

10 k efficiency



Technical Data

| | CHPI 10KTL | CHPI 12KTL | CHPI 18KTL | CHPI 20KTL |
|---|---------------------|--------------|--------------|--------------|
| Input Data | | | | |
| Max. DC power | 10500W | 12500W | 18700W | 20800W |
| Max. DC voltage | 1000V | 1000V | 1000V | 1000V |
| Start voltage | 350V | 350V | 350V | 350V |
| PV voltage range | 180V - 1000V | 180V - 1000V | 180V - 1000V | 180V - 1000V |
| MPP voltage range / DC nominal voltage | 300V - 1000V / 600V | | | |
| Full load dc voltage range | 400V - 800V | 400V - 800V | 400V - 800V | 400V - 800V |
| Number of MPP trackers /strings per MPP tracker | 2 / 2 | 2 / 2 | 2 / 3 | 2 / 3 |
| Max. input current | 15A / 15A | 17A / 17A | 23A / 23A | 26A / 26A |
| Max. input current per string | 20A | 20A | 20A | 20A |

| | CHPI 10KTL | CHPI 12KTL | CHPI 18KTL | CHPI 20KTL |
|---|--|--------------------------------|--------------------------------|--------------------------------|
| Output (AC) | | | | |
| Rated AC output power | 10KW | 12KW | 18KW | 20KW |
| Max. AC power | 10KVA | 12KVA | 18KVA | 20KVA |
| Max. output current | 16A | 19A | 28.6A | 32A |
| AC nominal voltage; range | 3/N/PE, 230V/400V ; 184 - 275V | | | |
| AC grid frequency ;range | 50/60Hz; 44-55Hz/54-65Hz | | | |
| Adjustable displacement power factor | 0.8 leading -0.8lagging | | | |
| THDI | <3% | <3% | <3% | <3% |
| AC Connection | Three phase | Three phase | Three phase | Three phase |
| Efficiency | | | | |
| Max. Efficiency | 98% | 98% | 98% | 98% |
| Euro-eta | 97.5% | 97.5% | 97.5% | 97.5% |
| MPPT efficiency | 99.5% | 99.5% | 99.5% | 99.5% |
| Protection Devices | | | | |
| DC reverse polarity protection | yes | yes | yes | yes |
| DC switch rating for each MPPT | yes | yes | yes | yes |
| Output over current protection | yes | yes | yes | yes |
| Output overvoltage protection-varistor | yes | yes | yes | yes |
| Ground fault monitoring | yes | yes | yes | yes |
| Grid monitoring | yes | yes | yes | yes |
| Integrated all-pole sensitive leakage current monitoring unit | yes | yes | yes | yes |
| General Data | | | | |
| Dimensions (W / H / D) in mm | 740/440/235 | 740/440/235 | 740/440/235 | 740/440/235 |
| Weight | 41KG | 41KG | 60KG | 60KG |
| Operating temperature range | -25 °C ... +60 °C | -25 °C ... +60 °C | -25 °C ... +60 °C | -25 °C ... +60 °C |
| Noise emission (typical) | ≤ 55 dB(A) | ≤ 55 dB(A) | ≤ 55 dB(A) | ≤ 55 dB(A) |
| Self-Consumption night | < 0.5 W | < 0.5 W | < 0.5 W | < 0.5 W |
| Topology | Transformerless | Transformerless | Transformerless | Transformerless |
| Cooling concept | Smart cooling | Smart cooling | Smart cooling | Smart cooling |
| Environmental Protection Rating | IP 65 | IP 65 | IP 65 | IP 65 |
| Altitude | 2000m without derating | | | |
| Relative Humidity | 0~95% | 0~95% | 0~95% | 0~95% |
| Features | | | | |
| DC connection | H4/MC4(opt) | H4/MC4(opt) | H4/MC4(opt) | H4/MC4(opt) |
| AC connection | Screw terminal | Screw terminal | Screw terminal | Screw terminal |
| Display | LCD | LCD | LCD | LCD |
| Interfaces: RS232/RS485/ Bluetooth/RF/Wi-Fi | yes / yes / opt / opt / opt | yes / yes / opt / opt / opt | yes / yes / opt / opt / opt | yes / yes / opt / opt / opt |
| Warranty: 5 years / 10 years | yes / opt | yes / opt | yes / opt | yes / opt |
| Certificates and Approvals | | | | |
| Certificates and Approvals | CE, G59/2, VDE-AR-N4105, RD1669, IEC62109-1, IEC62109-2, EN50438 | | | |