Design and specifications are subject to change without notice.
Version 1.0-2025

HYX-S250K/305K-HT
**Technical Specifications**

# STRING INVERTER
# HYX-S250K-HT
# HYX-S305K-HT



## Highly Profitable

- 75A design for higher output power
- 14% less switching loss, 99.03% conversion efficiency
- AI dynamic MPPT, boosting power generation by 5%

## Ultimately Reliable

- Terminal temperature monitoring with overheat protection
- Smart string disconnection, <25ms fast shutdown
- IP66, 1400+ cumulative rigorous tests

## Grid-Friendly

- Full power feed in grid at SCR<1.2
- THDi <1% for improved power quality

## Smart & Manageable

- Intelligent IV curve scanning with 99% fault detection accuracy
- Real-time monitoring with OTA for online maintenance

| Product Model | HYX-S250K-HT | HYX-S305K-HT |
|---|---|---|
| **PV Input** | | |
| Max. Input Voltage | 1,500V | |
| Nominal Input Voltage | 1,080V | |
| Start-up Voltage | 500V | |
| MPPT Operating Voltage Range | 480 - 1,500V | |
| Max. Input Current Per MPPT | 75A | |
| Max. Short-Circuit Current | 120A | |
| Number of MPPT | 6 | |
| Max. Input Number Per MPPT | 30 (Optional: 24) | |
| **AC Output** | | |
| Nominal Output Power | 250kW | 305kW |
| Max. Apparent Power | 275kVA | 305kVA |
| Nominal Output Voltage | 3L / PE, 800V | |
| Nominal AC Grid Frequency | 50Hz / 60Hz | |
| Nominal Output Current | 180.4A | 220A |
| Max. Output Current | 198.5A | 220A |
| Adjustable Power Factor | >0.99 (0.8 leading...0.8 lagging) | |
| THDi | < 3% | |
| **Efficiency** | | |
| Max. Efficiency | ≥99.03% | |
| European Weighted Efficiency | ≥98.8% | |
| MPPT Efficiency | 99.9% | |
| **Protection** | | |
| Active Anti-islanding Protection | Yes | |
| Residual Current Monitoring | Yes | |
| DC Reverse Polarity Protection | Yes | |
| DC Switch | Yes | |
| AC Short-Circuit Protection | Yes | |
| AC Overvoltage Protection | Yes | |
| AC Overcurrent Protection | Yes | |
| DC Surge Protection | Type II | |
| AC Surge Protection | Type II | |
| Ground Fault Detection | Yes | |
| Smart String-level Disconnection | Yes | |
| Smart Connector-level Detection | Yes | |
| **General Data** | | |
| Operating Temperature Range | -35 to + 60℃ | |
| Relative Operating Humidity | 0 - 100 %RH | |
| Operating Altitude | 5,000m | |
| Cooling | Smart Air Cooling | |
| Display | LED / WLAN+App | |
| Communication | RS485 / HPLC | |
| Weight | 130kg | |
| Dimensions (W*H*D) | 1120*820*380mm | |
| Topology | Non-Isolated | |
| Degree of Protection | IP66 | |
| Overvoltage Level | PV II / AC III | |