










SOFAR 50K~70KTL

50000/ 60000/ 70000

Three-Phase Three-MPPT

-  Super large 4-inch LCD
-  Outdoor IP65 protection level
-  Sound and light alarm function
-  DC SPD Class 2, over/under voltage, over current, over temperature, Anti-islanding and other multiple protections
-  Fuse free design
-  Built-in DRM port and logic
-  Max. efficiency up to 98.6%

| Datasheet | SOFAR 50000TL | SOFAR 60000TL | SOFAR 70000TL-HV |
|---|---|--|--|
| Input (DC) | | | |
| Recommended Max. PV input power | 66500Wp | 79800Wp | 93100Wp |
| Max DC power for single MPPT | 22000W 16000W 16000W | 22000W 22000W 22000W | 26000W 26000W 26000W |
| Number of MPP trackers | | 3 | |
| Number for DC inputs | 4/3/3 | 4/4/4 | 4/4/4 |
| Max. input voltage | | 1000V | |
| Start-up voltage | | 350V | |
| Rated input voltage | 600V | 600V | 700V |
| MPPT operating voltage range | | 250V-950V | |
| Full power MPPT voltage range | 530V-800V | 530V-800V | 660V-800V |
| Max. input MPPT current | 40A/30A/30A | 40A/40A/40A | 40A/40A/40A |
| Max. input current per string | | 12A | |
| Maximun DC input short circuit current per MPPT | 48A/36A/36A | 48A | 48A |
| Output (AC) | | | |
| Rated power | 50000W | 60000W | 70000W |
| Max. AC power | 50000VA | 60000VA | 75000VA |
| Max. Output current | 80A | 90A | 90A |
| Nominal grid voltage | 3/N/PE, 220/380Vac, 230/400Vac, 240/415Vac | | 3/N/PE or 3/PE, 277/480Vac |
| Grid voltage range | 310Vac-480Vac (According to local standard) | | 422Vac-528Vac(According to local standard) |
| Nominal frequency | | 50/60Hz | |
| Grid Frequency range | | 45Hz-55Hz/54Hz-66Hz (According to local standard) | |
| Active power adjustable range | | 0~100% | |
| THDi | | <3% | |
| Power factor | | >0.99 (adjustable+/-0.8) | |
| Performance | | | |
| Max efficiency | 98.5% | 98.6% | 98.6% |
| European weighted efficiency | 98.3% | 98.4% | 98.4% |
| Self-consumption at night | | <1W | |
| MPPT efficiency | | >99.9% | |
| Protection | | | |
| DC reverse polarity protection | | Yes | |
| DC switch | | Yes | |
| Protection class/ overvoltage category | | I/III | |
| Input/ output SPD(III) | | PV: type II standard, AC: type II optional | |
| Safety protection | | Anti islanding, RCMU, Ground fault monitoring | |
| ARPC | | Anti reverse power controller (optional) | |
| Communication | | | |
| Power management unit | | According to certification and request | |
| Standard communication mode | | RS485, Wifi/Ethernet/GPRS(optional), SD card, Multi-function relay | |
| Operation data storage | | 25 years | |
| General Data | | | |
| Ambient temperature range | | -25°C ~ +60°C | |
| Topology | | Transformerless | |
| Degree of protection | | IP65 | |
| Allowable relative humidity range | | 0~100% | |
| Max. operating altitude | | 4000m | |
| Noise | | ≤60dB | |
| Weight | 68kg | 70kg | 70kg |
| Cooling | | Fan | |
| Dimension | | 713*737*297mm | |
| Display | | LCD display | |
| Warranty | | 5 years/ 7 years/ 10 years | |
| Standard | | | |
| EMC | | EN 61000-6-2, EN 61000-6-4, EN 61000-3-11, EN 61000-3-12 | |
| Safety standards | | IEC62109-1/2, IEC62116, IEC61727, IEC-61683, IEC60068(1,2,14,30) | |
| Grid standards | | AS/NZS 4777, VDE V 0124-100, V 0126-1-1, VDE-AR-N 4105, BDEW, CEI 0-21/CEI 0-16, UNE 206 007-1, EN50549, G59, EN50530, NB/T32004 | |