

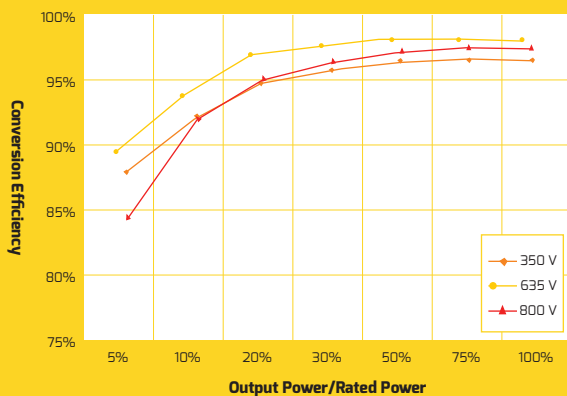
Three-Phase String Inverters 4 kW to 20 kW

We offer a range of eight three-phase string inverters for indoor and outdoor use with different maximum power capacities to cover the needs of residential and commercial use. All our inverters come with dual MPPT technology for increased efficiency of the entire photovoltaic system.

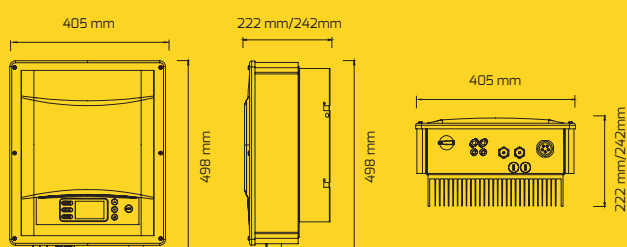
Evershine TLC Series



Conversion efficiency



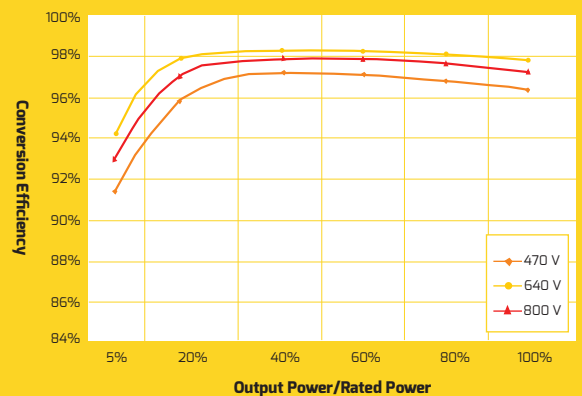
Technical data



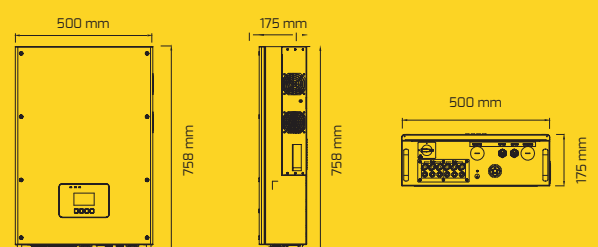
Eversol TLC Series



Conversion efficiency



Technical data



Three-Phase String Inverters 4 kW to 20 kW

| Technical data | Evershine TLC4000 | Evershine TLC5000 | Evershine TLC6000 | Evershine TLC8000 *** | Eversol TLC10K | Eversol TLC15K | Eversol TLC17K | Eversol TLC20K | |
|---|--|-------------------|-------------------|---|---|----------------|--|----------------|--|
| DC input data | | | | | | | | | |
| Max. PV array power [W] | 4200 | 5200 | 6300 | 8400 | 10400 | 15600 | 17600 | 20800 | |
| Max. DC voltage [V] | 900 | | | 1000 | 900 | | | | |
| Rated input voltage [V] | 640 | | | | | | | | |
| MPP voltage range [V] | 200-800 | | | 200-900 | 270-800 | | | | |
| Full load MPP voltage range [V] | 235-800 | 290-800 | 350-800 | 380-800 | 320-800 | 340-800 | 390-800 | 450-800 | |
| Switch-off DC voltage [V] | 180 | | | | 220 | | | | |
| Start voltage [V] | 250 | | | | 300 | | | | |
| Max. DC current [A] | 9/9 | | | 11/11 | 22/11 | 22/22 | | | |
| Max. number of parallel inputs | 1/1 | | | | 3/3 | | | | |
| Number of MPP trackers | 2 | | | | | | | | |
| Switch-on power [W] | 12 | | | | | | | | |
| Output data | | | | | | | | | |
| Rated AC power [W]** | 4000 | 5000 | 6000 | 8000 | 10000 | 15000 | 17000 | 20000 | |
| Max. apparent AC Power [VA] | 4000 | 5000 | 6000 | 8100 | 10000 | 15000 | 17000 | 20000 | |
| Rated AC grid voltage [V]* | 3/N/PE220/380,230/400,240/415 | | | | | | | | |
| Rated AC grid frequency [Hz]* | 50 | | | | 50/60 | | | | |
| AC voltage range [V]* | 160-280 | | | | 160-300 | | | | |
| AC frequency range [Hz] | According to local codes | | | | | | | | |
| Max. output current [A] | 3 x 7 | 3 x 8.5 | 3 x 9.2 | 3 x 13.3 | 3 x 16 | 3 x 24 | 3 x 25.8 | 3 x 30 | |
| Power factor | > 0.99 (0.85 inductive ... 0.85 capacitive) | | | | | | | | |
| Harmonic distortion (THD) at rated output | < 3% | | | | | | | | |
| Power consumption at night [W] | < 0.6 | | | | < 1 | | | | |
| Power consumption at standby [W] | < 12 | | | | | | | | |
| MPPT efficiency | | | | | | | | | |
| MPPT adaptation efficiency | > 99.50% | | | | | | | | |
| Conversion efficiency | | | | | | | | | |
| Max. efficiency | >98.00% | | | | >98.20% | >98.30% | | | |
| European weighted efficiency | 97.50% | | | | 97.80% | 97.90% | | | |
| Safety equipment | | | | | | | | | |
| DC insulation monitoring | Integrated | | | | | | | | |
| Earth fault protection | Integrated | | | | | | | | |
| Mains monitoring | Integrated | | | | | | | | |
| Earth fault current monitoring | Integrated | | | | | | | | |
| DC current monitoring | Integrated | | | | | | | | |
| General data | | | | | | | | | |
| Dimensions (WxHxD) [mm] | 405 x 498 x 222 | | | 405 x 498 x 242 | 500 x 758 x 175 | | | | |
| Weight [kg] | 21.8 | | | <24 | 48 | | | | |
| Installation environment | Indoor and outdoor | | | | | | | | |
| Mounting information | Wall mounting bracket | | | | | | | | |
| Operating temperature range | -25°C ... +60°C (derating in case of temperatures above 45°C) | | | | | | | | |
| Relative humidity | 0% to 100%, no condensation | | | | | | | | |
| IP protection type | IP65 as per EN60529 | | | | IP55 (fans), IP65 as per EN60529 (others) | | | | |
| Insulation type | Transformerless | | | | | | | | |
| Cooling concept | Convection | | | | Fan cooling | | | | |
| Noise level | < 40 dB(A)@1m | | | | < 55 dB(A)@1m | < 60 dB(A)@1m | | | |
| LCD display | LCD, 240 x 160 pixel | | | | | | | | |
| Communication interface | RS485 | | | | | | | | |
| Software updates interface | USB | | | | | | | | |
| Certificates and approvals | IEC61000-6-2, IEC61000-6-3, IEC61000-3-2, IEC61000-3-3, IEC62109-1, IEC62109-2, VDE0126-1-1/A1:2012, VDE0126-1-1:2013, VDE-AR-N 4105, NEN50438(only for TLC4K&6K), G83/2(only for TLC4K&6K), EN50438(only for TLC4K&6K), AS 4777.2(only for TLC5K), AS 4777.3(only for TLC5K), AS/NZS 3100(only for TLC5K), C10/11(only for TLC5K) | | | IEC61000-6-2, IEC61000-6-3, IEC61000-3-2, IEC61000-3-3, IEC62109-1, IEC62109-2, VDE-AR-N 4105, AS 4777.2 AS 4777.3, AS/NZS 3100, the standards as below only for Eversol TLC10K : VDE0126-1-1/A1:2012, VDE0126-1-1:2013, C10/11, PPC, UTEC 15-712-1 | | | IEC61000-6-2, IEC61000-6-3, IEC61000-3-11, IEC61000-3-12, IEC62109-1, IEC62109-2, AS/NZS3100, VDE-AR-N 4105, VDE0126-1-1/A1:2012, VDE0126-1-1:2013 AS4777.2, AS4777.3,C10/11, UTEC 15-712-1, NEN50438,G59/3, EN50438, BDEW 2008(only for TLC15K&TLC17K), CNCA/CTS0006, CNCA/CTS0004, PEA/MEA Guide IEC61727, IEC62116,IEC61683, IEC60068-2(1, 2, 14, 30) | | |

* The data may vary depending on the local grid standards.

** Within the scope of the EEG law an active power limitation according to current nationality EEG is present, which can be adjusted at any time when connected to a Power Monitoring Unit. (For Germany only)

*** Available from November 2014. Please contact your local sales team for further information.

As of July, 2014 / Technical data is subject to revisions.