

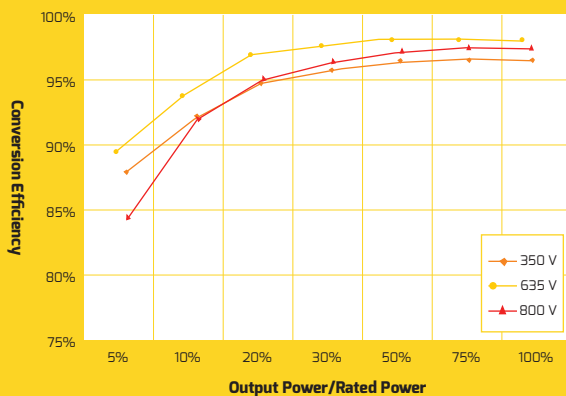
# Three-Phase String Inverters 4 kW to 20 kW

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.

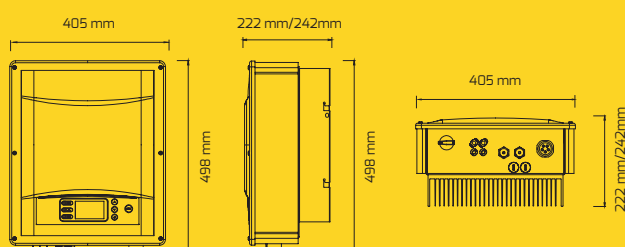
## Evershine TLC Series



### Conversion efficiency



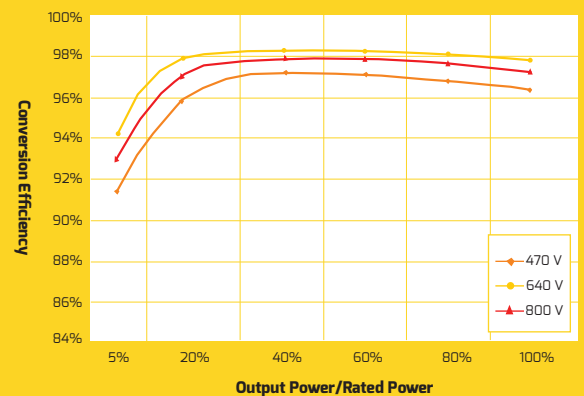
### Technical data



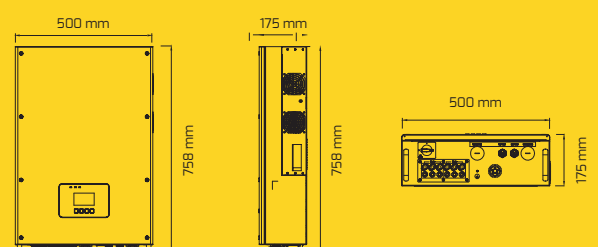
## Eversol TLC Series



### 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	
<b>DC input data</b>									
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								
<b>Output data</b>									
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								
<b>MPPT efficiency</b>									
MPPT adaptation efficiency	> 99.50%								
<b>Conversion efficiency</b>									
Max. efficiency	>98.00%				>98.20%	>98.30%			
European weighted efficiency	97.50%				97.80%	97.90%			
<b>Safety equipment</b>									
DC insulation monitoring	Integrated								
Earth fault protection	Integrated								
Mains monitoring	Integrated								
Earth fault current monitoring	Integrated								
DC current monitoring	Integrated								
<b>General data</b>									
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.