

Technical Data



PVI3200TL  
PVI4000TL  
PVI4600TL  
PVI5400TL

Features:

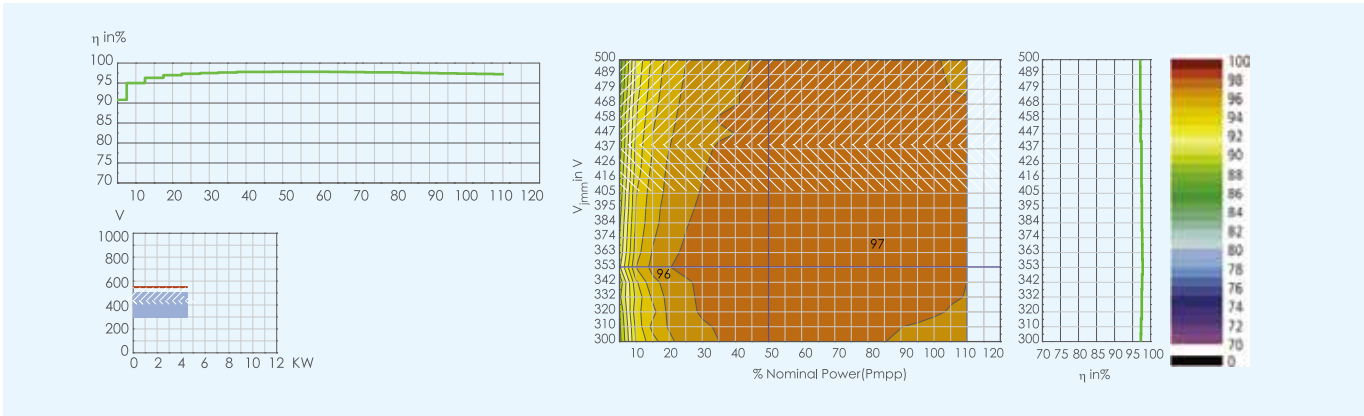
- > Max efficiency 97.8%
- > High efficiency across wide operation range
- > Wide range of input DC and MPPT voltage
- > Low turn-off DC voltage
- > IP65 protection against water and dust
- > Dual independent MPPT input
- > DC switch option



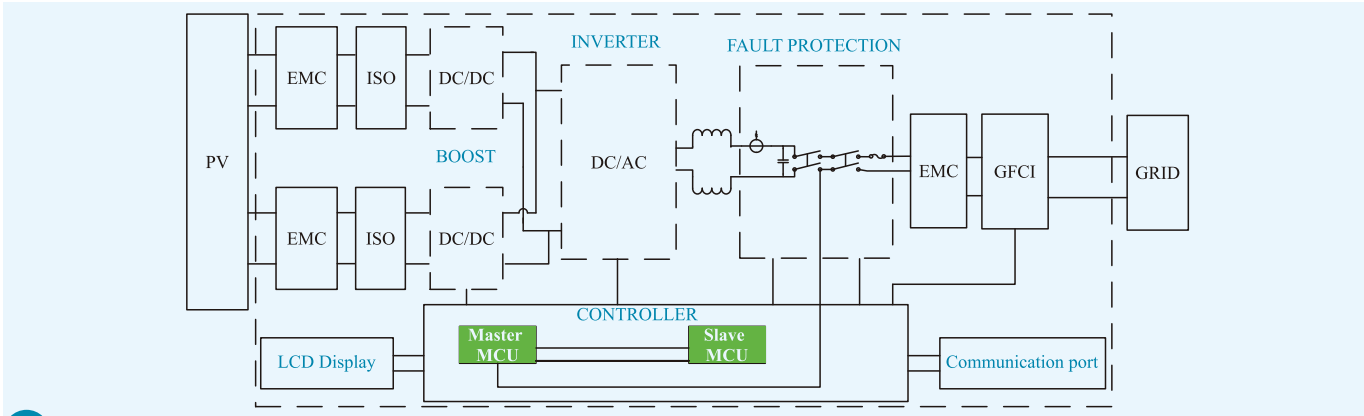
Certificates and Approvals:

CE, VDE AR-N-4105, VDE 0126-1-1+A1, G83/2, G59/2, G59/3, AS4777, ENEL, RD1663, IEC61727, UTE C15-712, MEA, PEA, CQC, NB/T32004-2013, ROHS, REACH

Efficiency Curve From Photon Lab (PVI4600TL):



Circuit Diagram:



PVI Series

PVI3200TL / PVI4000TL / PVI4600TL / PVI5400TL

| Model                              | PVI3200TL   | PVI4000TL       | PVI4600TL       | PVI5400TL       |
|------------------------------------|---|-----------------|-----------------|-----------------|
| Rated AC power                     | 2800 W  | 3650 W          | 4000 W          | 4600 W          |
| Maximum AC power                   | 3080 VA   | 3650 VA         | 4400 VA         | 5000 VA         |
| Input                              |   |                 |                 |                 |
| Maximum input power                | 3200 W  | 4000 W          | 4600 W          | 5400 W          |
| Maximum input voltage              | 600 Vdc   | 600 Vdc         | 600 Vdc         | 600 Vdc         |
| MPPT operating range               | 90 - 530 Vdc  | 90 - 530 Vdc    | 90 - 530 Vdc    | 90 - 530 Vdc    |
| Maximum input current              | 12 Adc / 12 Adc   | 12 Adc / 12 Adc | 12 Adc / 12 Adc | 12 Adc / 12 Adc |
| Startup voltage                    | 90 Vdc  | 90 Vdc          | 90 Vdc          | 90 Vdc          |
| DC switch                          | optional  | optional        | optional        | optional        |
| Initial feeding voltage            | 110 Vdc   | 110 Vdc         | 110 Vdc         | 110 Vdc         |
| Number of inputs                   | 2   | 2               | 2               | 2               |
| MPPT number                        | 2   | 2               | 2               | 2               |
| Output                             |   |                 |                 |                 |
| Grid voltage                       | 230 Vac   | 230 Vac         | 230 Vac         | 230 Vac         |
| Grid phase                         | single phase  | single phase    | single phase    | single phase    |
| Grid voltage range                 | 180 - 270 V (May vary as per corresponding country's grid standard) |                 |                 |                 |
| Frequency range                    | 50 Hz, 60Hz / -5 Hz ... +5 Hz                                       |                 |                 |                 |
| Power factor                       | Rated >0,99 0,8 leading...0,8 lagging controllable                  |                 |                 |                 |
| Maximum current                    | 15,7 Aac  | 15,9 Aac        | 22,5 Aac        | 26 Aac          |
| DC current injection (max.)        | <20 mA  | <20 mA          | <20 mA          | <20 mA          |
| Current Harmonic Distorsion (THDi) | <1%   | <1%             | <1%             | <1%             |
| System                             |   |                 |                 |                 |
| Maximum efficiency                 | >97,8%  | >97,8%          | >97,8%          | >97,8%          |
| European efficiency                | >97,3%  | >97,3%          | >97,3%          | >97,3%          |
| MPPT efficiency                    | >99,5%  | >99,5%          | >99,5%          | >99,5%          |
| Topology                           | Transformerless   | Transformerless | Transformerless | Transformerless |
| Anti-Islanding protection          | Yes   | Yes             | Yes             | Yes             |
| Night power consumption            | <0,2 W  | <0,2 W          | <0,2 W          | <0,2 W          |
| Detecting earth leakage            | Yes   | Yes             | Yes             | Yes             |
| Cooling                            | Convection  | Convection      | Convection      | Convection      |
| Mechanical Spec.                   |   |                 |                 |                 |
| Dimensions in mm                   | 500 x 360 x 150   |                 |                 |                 |
| Weight                             | 21 Kg   | 21 Kg           | 21 Kg           | 21 Kg           |
| IP degree                          | IP65  |                 |                 |                 |
| Display                            | LCD 2 x 16 characters   |                 |                 |                 |
| Function key                       | 1   |                 |                 |                 |
| Data interface                     | RS232 / RS485 / Ethernet / WiFi / GPRS / USB                        |                 |                 |                 |
| Thermal protection                 | Yes   |                 |                 |                 |
| Audible noise level                | <40 dB  |                 |                 |                 |
| Ambient operating temp.            | -25 °C - +60 °C (>45 °C derating)                                   |                 |                 |                 |