

Technical Data



PVI3200TL
PVI4000TL
PVI4600TL
PVI5400TL

Features:

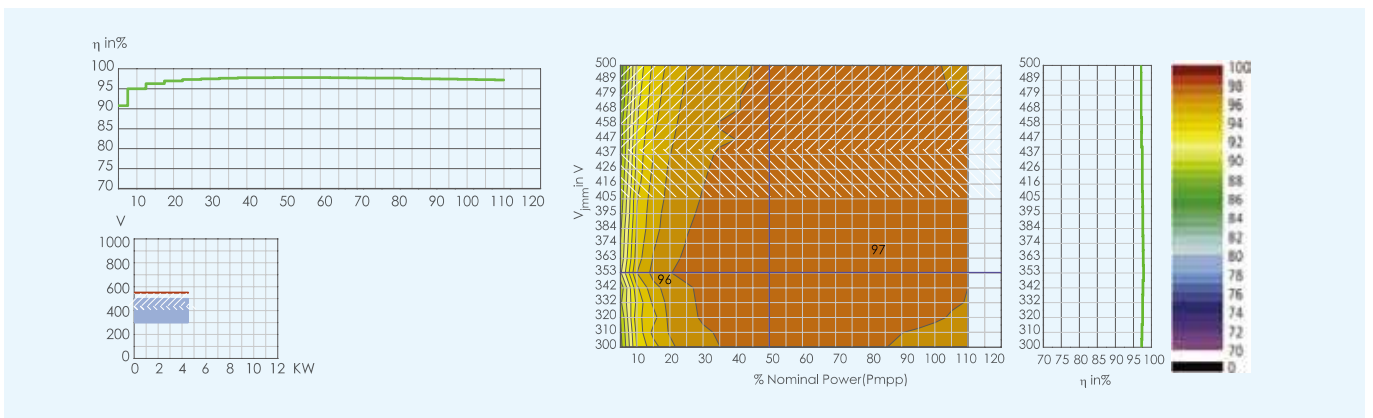
- > Max efficiency 97.8%
- > High efficiency across wide operation range
- > Wide range of input DC and MPPT voltage
- > Low turn-off DC voltage
- > IP65 protection against water and dust
- > Dual independent MPPT input
- > DC switch option



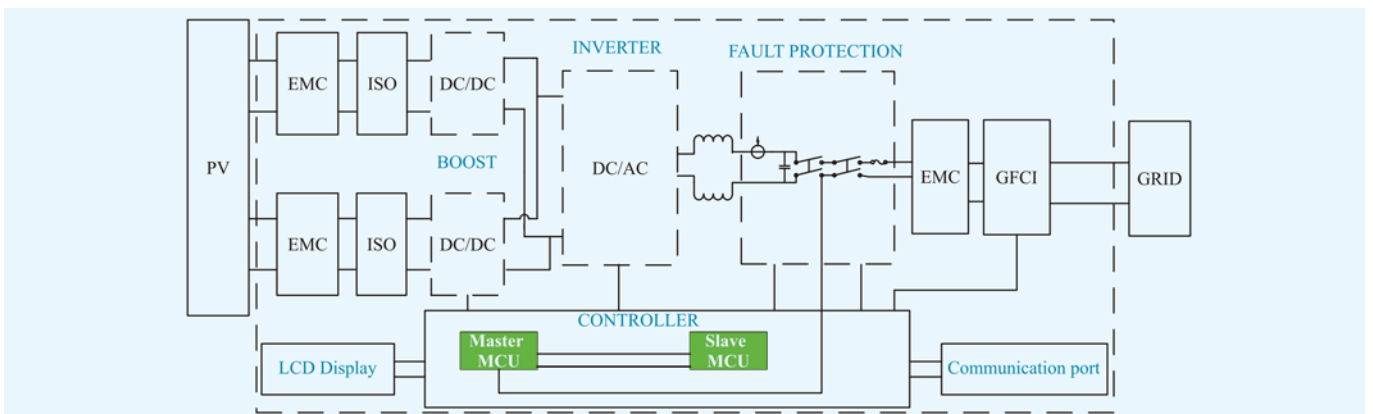
Certificates and Approvals:

CE, VDE AR-N-4105, VDE 0126-1-1+A1, G83/1, G83/2, G59/2, AS4777, ENEL, RD1663, IEC61727, UTE C15-712, MEA, PEA, CQC, 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 W | 3650 W | 4400 W | 5000 W |
| Input | | | | |
| Maximum input power | 3200 W | 4000 W | 4600 W | 5400 W |
| Maximum DC voltage in an open circuit | 550 Vdc | 550 Vdc | 550 Vdc | 550 Vdc |
| MPPT operating range | 125 - 530 Vdc | 125 - 530 Vdc | 125 - 530 Vdc | 125 - 530 Vdc |
| Maximum input current | 20 Adc | 20 Adc | 20 Adc | 20 Adc |
| Startup voltage | 90 Vdc | 90 Vdc | 90 Vdc | 90 Vdc |
| DC switch | optional | optional | optional | optional |
| Initial feeding voltage | 150 Vdc | 150 Vdc | 150 Vdc | 150 Vdc |
| Number of inputs | 2 | 2 | 2 | 2 |
| MPPT number | 2 | 2 | 2 | 2 |
| Output | | | | |
| Operating voltage | 230 Vac | 230 Vac | 230 Vac | 230 Vac |
| Number of grid phases | 1 | 1 | 1 | 1 |
| Voltage range | 180 V - 270 V | | | |
| Frequency range | 50 Hz, 60 Hz / -6 Hz...+5 Hz | | | |
| Power factor | -0,95 - 0,95 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% |
| Switching plan | self-commutated, transformerless | | | |
| Off-grid 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 |
| Heat dissipation | Convection | Convection | Convection | Convection |
| Mechanical Spec. | | | | |
| Dimensions in mm | 500 x 360 x 150 | | | |
| Weight | 21 Kg | 23 Kg | 23 Kg | 23,5 Kg |
| Protection class | IP65 | | | |
| Display | LCD 2 x 16 characters | | | |
| Function key | 1 | | | |
| Data interface | RS232 / RS485 / Ethernet / WiFi / GPRS | | | |
| Thermal protection | Yes | | | |
| Noise emission | <40 dB (silent operation) | | | |
| Ambient operating temp. | -20 °C - +60 °C (>45 °C derating) | | | |