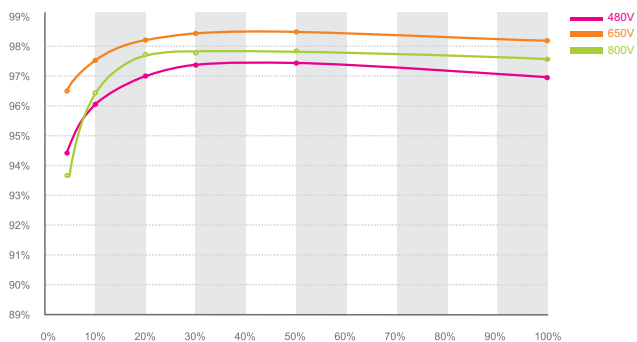


## Leading - edge Technology

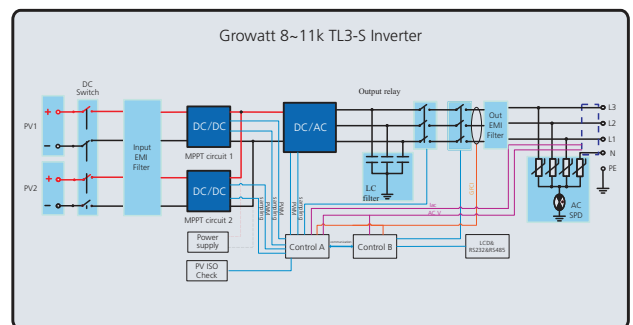
- ▶ Max. DC Voltage up to 1000V
- ▶ Max efficiency 98.4%
- ▶ Compact design
- ▶ Multi MPP controller
- ▶ Natural cooling, fanless design
- ▶ Max. DC/AC ratio up to 1.2
- ▶ Long-term overload at 1.1 Pn
- ▶ High power density, offer lighter and easy installation
- ▶ Flexible communication connection, support RF, WiFi, Ethernet
- ▶ Comprehensive Growatt warranty program



Growatt 11000TL3-S efficiency



Growatt 8-11kTL3-S topology



| Datasheet   | Growatt 8000TL3-S                               | Growatt 9000TL3-S                               | Growatt 10000TL3-S                              | Growatt 11000TL3-S                              |
|---|---|---|---|---|
| <b>Input data</b>   |   |   |   |   |
| Max. recommended PV power (for module STC)                    | 9600W   | 10800W  | 12000W  | 13200W  |
| Max. DC voltage   | 1000V   | 1000V   | 1000V   | 1000V   |
| Start Voltage   | 250V  | 250V  | 250V  | 250V  |
| PV voltage range  | 160V-1000V                                      | 160V-1000V                                      | 160V-1000V                                      | 160V-1000V                                      |
| Nominal voltage   | 600V  | 600V  | 600V  | 600V  |
| MPP voltage range at Full Power                               | 360V-850V                                       | 400V-850V                                       | 450V-850V                                       | 450V-850V                                       |
| Max. input current  | 11.5A/11.5A                                     | 11.5A/11.5A                                     | 13A/13A   | 13A/13A   |
| Max. input current per string                                 | 12A   | 12A   | 12A   | 12A   |
| Number of independent MPP trackers/ strings per MPP tracker   | 2/1   | 2/1   | 2/1   | 2/1   |
| <b>Output (AC)</b>  |   |   |   |   |
| Rated AC output power   | 8kW   | 9kW   | 10kW  | 11kW  |
| Max AC apparent power   | 8.8kVA  | 9.9kVA  | 11kVA   | 12.1kVA   |
| Max. output current   | 13.3A   | 15A   | 16.7A   | 18.3A   |
| AC nominal voltage; range                                     | 230V/400V<br>184~275V                           | 230V/400V<br>184~275V                           | 230V/400V<br>184~275V                           | 230V/400V<br>184~275V                           |
| AC grid frequency   | 50/60Hz   | 50/60Hz   | 50/60Hz   | 50/60Hz   |
| Power factor  | 0.8leading - 0.8laging                          | 0.8leading - 0.8laging                          | 0.8leading - 0.8laging                          | 0.8leading - 0.8laging                          |
| THDi @Full load&Thdv<1%                                       | <3%   | <3%   | <3%   | <3%   |
| AC grid connection type                                       | 3/N/PE  | 3/N/PE  | 3/N/PE  | 3/N/PE  |
| <b>Efficiency</b>   |   |   |   |   |
| Max. efficiency   | 98.3%   | 98.4%   | 98.4%   | 98.4%   |
| Euro - eta  | 97.8%   | 98%   | 98%   | 98%   |
| MPPT efficiency   | 99.5%   | 99.5%   | 99.5%   | 99.5%   |
| <b>Protection Devices</b>                                     |   |   |   |   |
| DC reverse polarity protection                                | yes   | yes   | yes   | yes   |
| DC switch for each MPPT                                       | yes   | yes   | yes   | yes   |
| Output over current protection                                | yes   | yes   | yes   | yes   |
| Output AC overvoltage Protection - Varistor                   | yes   | yes   | yes   | yes   |
| Ground fault monitoring                                       | yes   | yes   | yes   | yes   |
| Grid monitoring   | yes   | yes   | yes   | yes   |
| Integrated all-pole sensitive leakage current monitoring unit | yes   | yes   | yes   | yes   |
| <b>General Data</b>   |   |   |   |   |
| Dimensions(W/H/D)   | 480/448/200 mm                                  | 480/448/200 mm                                  | 480/448/200 mm                                  | 480/448/200 mm                                  |
| Weight  | 21.6kg  | 21.6kg  | 21.6kg  | 21.6kg  |
| Operating temperature range                                   | -25 °C ... +60 °C<br>(with derating above 45°C) | -25 °C ... +60 °C<br>(with derating above 45°C) | -25 °C ... +60 °C<br>(with derating above 45°C) | -25 °C ... +60 °C<br>(with derating above 45°C) |
| Noise emission (typical)                                      | ≤35 dB(A)                                       | ≤35 dB(A)                                       | ≤35 dB(A)                                       | ≤35 dB(A)                                       |
| Altitude  | 3000m   | 3000m   | 3000m   | 3000m   |
| Self-consumption night  | < 0.5W  | < 0.5W  | < 0.5W  | < 0.5W  |
| Topology  | Transformerless                                 | Transformerless                                 | Transformerless                                 | Transformerless                                 |
| Cooling concept   | Natural   | Natural   | Natural   | Natural   |
| Environmental Protection Rating                               | IP65  | IP65  | IP65  | IP65  |
| Relative humidity   | 0~100%  | 0~100%  | 0~100%  | 0~100%  |
| <b>Features</b>   |   |   |   |   |
| DC connection   | H4/MC4(opt)                                     | H4/MC4(opt)                                     | H4/MC4(opt)                                     | H4/MC4(opt)                                     |
| AC connection   | Screw terminal                                  | Screw terminal                                  | Screw terminal                                  | Screw terminal                                  |
| Display   | LCD   | LCD   | LCD   | LCD   |
| Interfaces:RS232/RS485/RF/Ethernet/Wi-Fi                      | yes/yes/opt/opt/opt                             | yes/yes/opt/opt/opt                             | yes/yes/opt/opt/opt                             | yes/yes/opt/opt/opt                             |
| Warranty:5 years/10 years                                     | yes/opt   | yes/opt   | yes/opt   | yes/opt   |
| <b>Certificates and Approvals</b>                             |   |   |   |   |