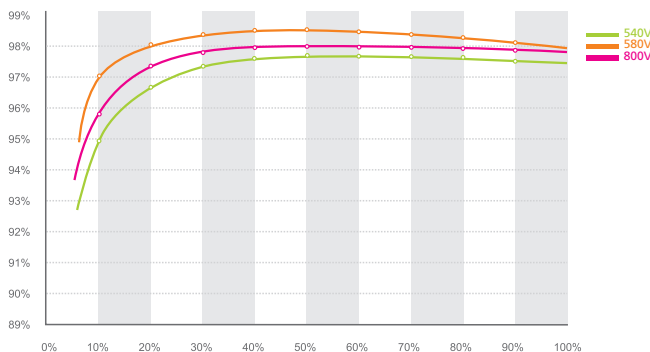


## Leading - edge Technology

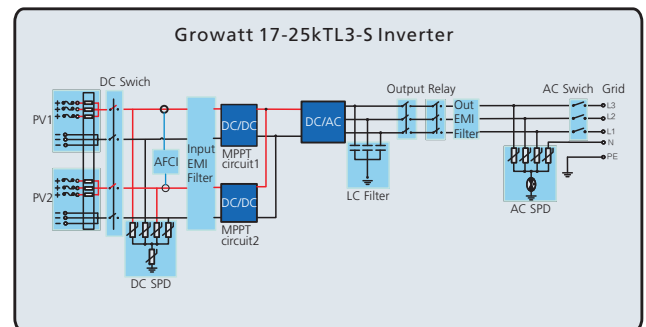
- ▶ Maximum efficiency of 98.7%
- ▶ Multi MPP controller and MTL string
- ▶ 6 strings intelligent monitoring and Fuse protection
- ▶ Leading IPM (Intelligent Power Module), more reliable
- ▶ Internal DC switch and Transformerless
- ▶ Type II surge arresters for both DC and AC
- ▶ Anti-PID for PV module
- ▶ Supporting AC power supply
- ▶ Compact design and easy installation
- ▶ Comprehensive warranty program



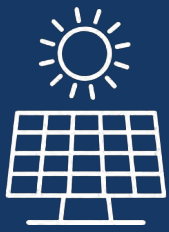
Growatt 25000TL3-S efficiency



Growatt 17-25kTL3-S topology



| Datasheet  | Growatt 17000TL3-S        | Growatt 20000TL3-S        | Growatt 25000TL3-S        |
|--|---------------------------|---------------------------|---------------------------|
| <b>Input Data</b>                                |                           |                           |                           |
| Max recommended PV Power (for module STC)        | 21250W                    | 25000W                    | 31250W                    |
| Max DC voltage                                   | 1000V                     | 1000V                     | 1000V                     |
| Start Voltage                                    | 250V                      | 250V                      | 250V                      |
| PV voltage range                                 | 200V - 1000V              | 200V - 1000V              | 200V - 1000V              |
| Nominal voltage                                  | 580V                      | 580V                      | 580V                      |
| Full load MPP voltage range                      | 400V - 800V               | 400V - 800V               | 400V - 800V               |
| Max. input current                               | 37.5A/37.5A               | 37.5A/37.5A               | 37.5A/37.5A               |
| Max. input current per string                    | 12.5A                     | 12.5A                     | 12.5A                     |
| Number of MPP trackers / strings per MPP tracker | 2/3                       | 2/3                       | 2/3                       |
| <b>Output (AC)</b>                               |                           |                           |                           |
| Rated AC output power                            | 17000W                    | 20000W                    | 25000W                    |
| Max. AC apparent power                           | 18800VA                   | 22200VA                   | 27700VA                   |
| Max. output current                              | 27.5A                     | 32.2A                     | 40.3A                     |
| AC nominal voltage;range                         | 230V/400V ; 320-478V      | 230V/400V ; 320-478V      | 230V/400V ; 320-478V      |
| AC grid frequency                                | 50Hz/60Hz ±5Hz            | 50Hz/60Hz ±5Hz            | 50Hz/60Hz ±5Hz            |
| Power factor                                     | 0.8 leading - 0.8 lagging | 0.8 leading - 0.8 lagging | 0.8 leading - 0.8 lagging |
| THDi   | <3%                       | <3%                       | <3%                       |
| AC grid connection type                          | 3W+N+PE                   | 3W+N+PE                   | 3W+N+PE                   |
| <b>Efficiency</b>                                |                           |                           |                           |
| Max. efficiency                                  | 98.7%                     | 98.7%                     | 98.7%                     |
| Euro - eta                                       | 98.4%                     | 98.4%                     | 98.4%                     |
| MPPT efficiency                                  | 99.5%                     | 99.5%                     | 99.5%                     |
| <b>Protection Devices</b>                        |                           |                           |                           |
| DC reverse polarity protection                   | yes                       | yes                       | yes                       |
| DC Switch  | yes                       | yes                       | yes                       |
| DC Surge protection                              | Typell                    | Typell                    | Typell                    |
| Ground fault monitoring                          | yes                       | yes                       | yes                       |
| Output short circuit protection                  | yes                       | yes                       | yes                       |
| AC Surge protection                              | Typell                    | Typell                    | Typell                    |
| String Fuse protection                           | yes                       | yes                       | yes                       |
| String fault monitoring                          | yes                       | yes                       | yes                       |
| Anti-PID protection                              | yes                       | yes                       | yes                       |
| <b>General Data</b>                              |                           |                           |                           |
| Dimensions (W / H / D)                           | 470/754/270 mm            | 470/754/270 mm            | 470/754/270 mm            |
| Weight   | 48kg                      | 48kg                      | 48kg                      |
| Operating temperature range                      | -25 °C ... +60 °C         | -25 °C ... +60 °C         | -25 °C ... +60 °C         |
| Noise emission (typical)                         | ≤50 dB(A)                 | ≤50 dB(A)                 | ≤50 dB(A)                 |
| Self-Consumption (night)                         | <1W                       | <1W                       | <1W                       |
| Topology   | Transformerless           | Transformerless           | Transformerless           |
| Cooling concept                                  | Smart cooling             | Smart cooling             | Smart cooling             |
| Environmental Protection Rating                  | IP65                      | IP65                      | IP65                      |
| Altitude   | 4000m                     | 4000m                     | 4000m                     |
| Relative Humidity                                | 0~100%                    | 0~100%                    | 0~100%                    |
| <b>Features</b>                                  |                           |                           |                           |
| Display  | LED+ LCD                  | LED+ LCD                  | LED+ LCD                  |
| Interfaces: RS232/R485/WiFi                      | yes / yes / opt           | yes / yes / opt           | yes / yes / opt           |
| Warranty:5 years / 10 years                      | yes / opt                 | yes / opt                 | yes / opt                 |
| <b>Certificates and Approvals</b>                |                           |                           |                           |



## PANEL FOTOVOLTAICO POLICRISTALINO DE 60 CELULAS

### EFICIENCIA



Elevada eficiencia del panel fotovoltaico, por la utilización de 5 bus bar por célula.

### GARANTIA



Nuestros paneles fotovoltaicos se garantizan por veinticinco años en cuanto a potencia con depreciación lineal y diez años de garantía contra defectos de fabricación.

### CERTIFICACIONES



Los paneles fotovoltaicos cumplen con las normativas siguientes:

Fuego: Clase C  
IEC 61215(ed.2)  
IEC 61730-1(ed.1); am1; am2  
IEC 61730-2(ed.1); am1  
EN 61215:2005  
EN 61730-1:2007/A2:2013  
EN 61730-2:2007/A1:2012

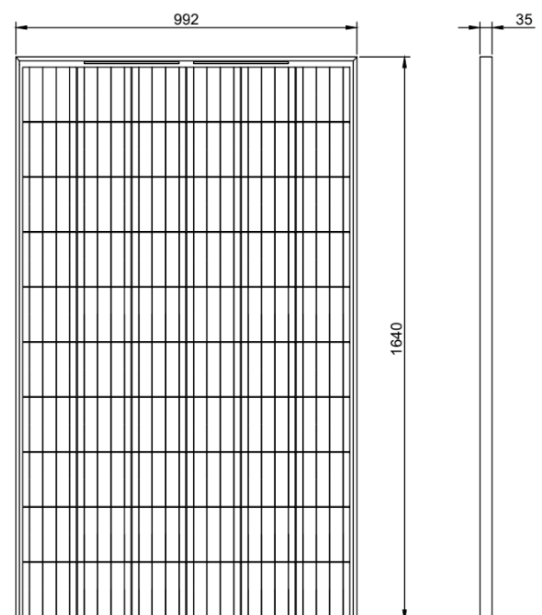


### TOLERANCIA

Un estricto control de calidad, garantiza una tolerancia de entre el 0% al 3%



### DIMENSIONES



NOTA: Dimensiones en mm.  
Ficha Técnica sujeta a cambios sin previo aviso

## PANEL FOTOVOLTAICO LS265P, LS270P, LS275P, LS280P.

| DATOS ELECTRICOS  | LS265P          | LS270P          | LS275P          | LS280P          |
|--|-----------------|-----------------|-----------------|-----------------|
| <b>Potencia Máxima (Pmax)</b>  | 265Wp (0% a 3%) | 270Wp (0% a 3%) | 275Wp (0% a 3%) | 280Wp (0% a 3%) |
| <b>Voltaje a Máxima Potencia (Vmp)</b>   | 30.6 Voltios    | 30.7 Voltios    | 30.8 Voltios    | 30.9 Voltios    |
| <b>Corriente a Máxima Potencia (Imp)</b>   | 8.66 Amperios   | 8.8 Amperios    | 8.93 Amperios   | 9.07 Amperios   |
| <b>Voltaje a Circuito Abierto (Voc)</b>  | 36.72 Voltios   | 36.84 Voltios   | 36.93 Voltios   | 37.08 Voltios   |
| <b>Corriente de Corto Circuito (Isc)</b>   | 9.27 Amperios   | 9.41 Amperios   | 9.56 Amperios   | 9.71 Amperios   |
| <b>Eficiencia del panel</b>  | 16.29%          | 16.6%           | 16.9%           | 17.21%          |

## DATOS TERMICOS, MECANICOS Y ELECTRICOS

|   |                  |
|---|------------------|
| <b>NOCT</b>                               | 45°C ± 2°C       |
| <b>Coefficiente de Temperatura Voc</b>    | -0.34%/°C        |
| <b>Coefficiente de Temperatura Isc</b>    | 0.037%/°C        |
| <b>Coefficiente de Temperatura Pmax</b>   | -0.48%/°C        |
| <b>Voltaje máximo del sistema</b>         | 1,500VDC         |
| <b>Temperatura de funcionamiento</b>      | -40°C a 85°C     |
| <b>Fusible</b>                            | 15A              |
| <b>Configuración de los pallets</b>       | 30pcs            |
| <b>Configuración del contenedor 40'HQ</b> | 28 pallet/840pcs |

## DATOS DE LAS CELULAS

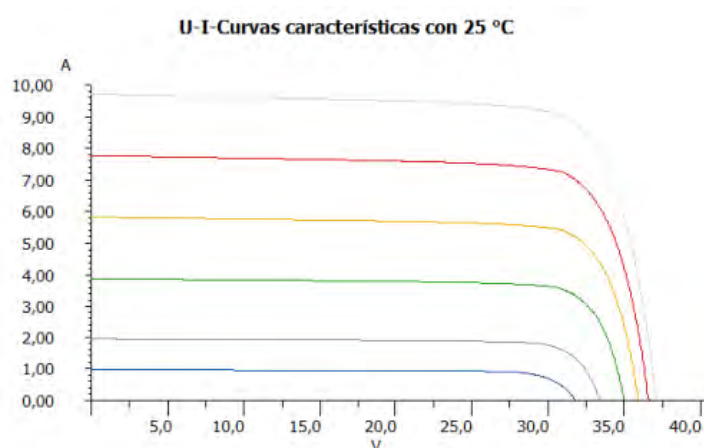
|                           |                        |
|---------------------------|------------------------|
| <b>Tecnología</b>         | Silicio Policristalino |
| <b>Cantidad por Panel</b> | 60 células             |
| <b>Dimensión</b>          | 156 x 156 mm           |
| <b>Orientación</b>        | 6 x 10                 |

## CARACTERISTICAS

## MECANICAS

|                            |                                     |
|----------------------------|-------------------------------------|
| <b>Dimensiones</b>         | 992 x 1640 x 35 mm                  |
| <b>Peso</b>                | 18.3 kg                             |
| <b>Caja de Conexiones</b>  | IP67, 3 diodos                      |
| <b>Cables y conectores</b> | 4mm <sup>2</sup> 1M, MC4 compatible |

## CURVAS DE TENSION Y CORRIENTE LS280P



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