

Growatt 50000~60000 TL3-HE

- Maximum efficiency up to 99%
- Maximum input voltage 1100Vdc
- 11 strings and fuse protection
- Leading IPM (Intelligent Power Module), more reliable
- Compact design and easy installation



P O W E R
- I N G O
T O M O -
R R O W O



Datasheet	Growatt 50000 TL3-HE	Growatt 60000 TL3- HE
Input Data		
Max. DC power	57500W	6900W
Max. DC voltage	1100V	1100V
Start voltage	580V	580V
PV voltage range	580V-1000V	580V-1000V
MPPT work voltage range / nominal voltage	580V-1000V/680V	580V-1000V/680V
Full load dc voltage range	580V-800V	580V-800V
Max. input current	87.5A	105A
Max. input current per string	12A	12A
Number of independent MPP trackers/strings per MPP tracker	1/11	1/11
Output (AC)		
Rated AC output power	50KW	60KW
Max AC apparent power	50KVA	60KVA
Max. output current	72.5A	87A
AC nominal voltage; range	400V/340V~440V	400V/340V~440V
AC grid frequency; range	50/60Hz, ±5Hz	50/60Hz, ±5Hz
Power factor	0.8leading - 0.8lagging	0.8leading - 0.8lagging
THDI	<3%	<3%
AC grid connection type	3W+N+PE	3W+N+PE
Efficiency		
Max. efficiency	99%	99%
Euro - eta	98.5%	98.5%
MPPT efficiency	99.9%	99.9%
Protection devices		
DC reverse polarity protection	yes	yes
DC switch	yes	yes
Output over current protection	yes	yes
Output overvoltage protection-varistor	yes	yes
Ground fault monitoring	yes	yes
Grid monitoring	yes	yes
Integrated all-pole sensitive leakage current monitoring unit	yes	yes
General Data		
Dimensions (W / H / D) in mm	560/759/260	560/759/260
Weight	48kg	48kg
Operating temperature range	-25°C ...+60°C	-25°C ...+60°C
Noise emission (typical)	≤ 70dB(A)	≤ 70dB(A)
Altitude	≤2000m without derating	≤2000m without derating
Self-Consumption (night)	<0.5W	<1.0W
Topology	transformerless	transformerless
Cooling concept	Smart cooling	Smart cooling
Environmental Protection Rating	IP65	IP65
Relative humidity	0~100% (Non-condensing)	0~100% (Non-condensing)
Features		
DC connection	H4/MC4(opt)	H4/MC4(opt)
AC connection	Screw terminal	Screw terminal
Display	LCD	LCD
Interfaces: RS232/RS485/Ethernet/RF/Wi-Fi	yes / yes / opt / opt / opt	yes / yes / opt / opt / opt
Warranty:5 years/10 years	yes/opt	yes/opt
Certificates and Approvals		
CQC, CE		