

EESOLAR-29.9/40KLT-M3

Smart String Inverter



Smart

8 strings intelligent monitoring



Efficient

Max. efficiency 98.7%



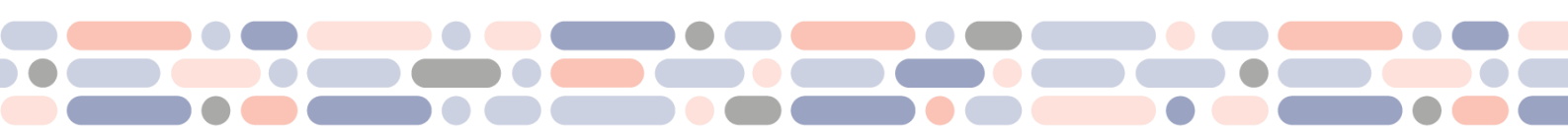
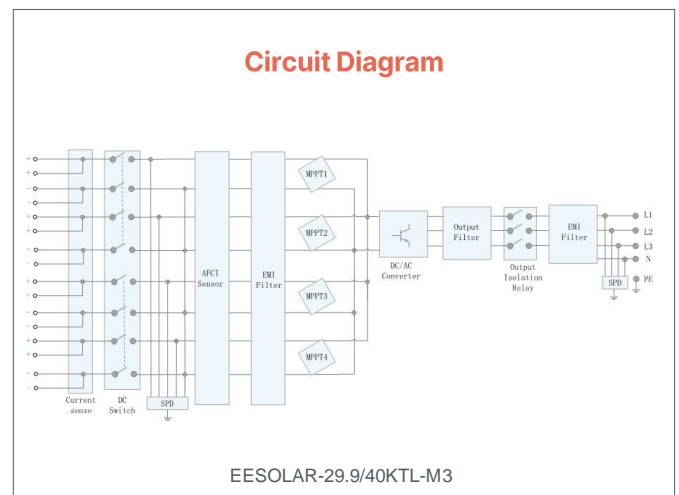
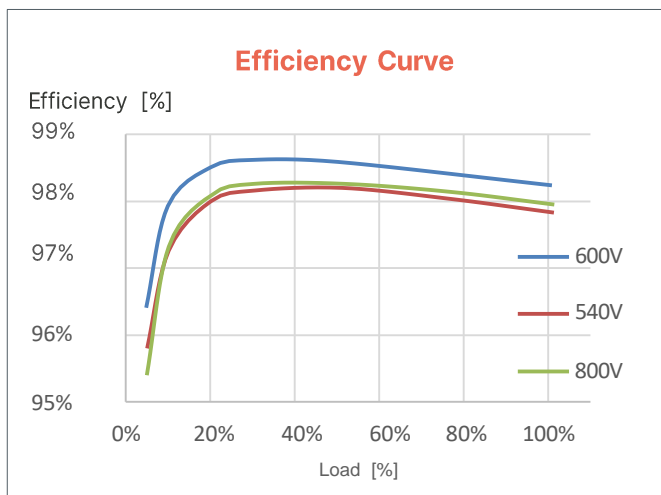
Safe

Fuse free design



Reliable

Type II surge arresters for DC & AC



EESOLAR-29.9/40KTL-M3

Technical Specification

Technical Specification	EESOLAR-29.9KTL-M3	EESOLAR-40KTL-M3
Efficiency		
Max. Efficiency	98.7%	
European Efficiency	98.4%	
Input		
Max. Input Voltage ¹	1,100 V	
Max. Current per MPPT	27 A	
Max. Short Circuit Current per MPPT	40 A	
Start Voltage	200 V	
MPPT Operating Voltage Range ²	200 V ~ 1000 V	
Rated Input Voltage	600 V	
Number of Inputs	8	
Number of MPP Trackers	4	
Output		
Rated AC Active Power	29,900 W	40,000 W
Max. AC Apparent Power	29,900 VA	44,000 VA
Rated Output Voltage	230 Vac / 400 Vac, 3W/N+PE	
Rated AC Grid Frequency	50 Hz / 60 Hz	
Rated Output Current	43.2 A	57.8 A
Max. Output Current	43.2 A	63.8 A
Adjustable Power Factor Range	0.8 LG ... 0.8 LD	
Max. Total Harmonic Distortion	< 3%	
Protection		
Input-side Disconnection Device	Yes	
Anti-islanding Protection	Yes	
AC Overcurrent Protection	Yes	
DC Reverse-polarity Protection	Yes	
PV-array String Fault Monitoring	Yes	
DC Surge Arrester	Yes	
AC Surge Arrester	Yes	
DC Insulation Resistance Detection	Yes	
Residual Current Monitoring Unit	Yes	
Arc Fault Protection	Yes	
Ripple Receiver Control	Yes	
Integrated PID Recovery ³	Yes	
Communication		
Display	LED Indicators, Integrated WLAN + APP	
RS485	Yes	
Communication	WLAN/Fast Ethernet via Smart EEDongleA-05 (Optional) Fast Ethernet/4G via EELogger3000 (Optional)	
General Data		
Dimensions (W x H x D)	640 x 530 x 270 mm (25.2 x 20.9 x 10.6 inch)	
Weight (with Mounting Plate)	43 kg (94.8 lb)	
Noise Level	< 46 dB	
Operating Temperature Range	-25 ~ + 60 °C (-13 °F ~ 140 °F)	
Cooling Method	Natural Convection	
Max. Operating Altitude	0 - 4,000 m (13,123 ft.)	
Relative Humidity	0% RH ~ 100% RH	
DC Connector	Staubli MC4	
AC Connector	Waterproof Connector + OT/DT Terminal	
Protection Degree	IP 66	
Topology	Transformerless	
Nighttime Power Consumption	≤5.5W	
Optimizer Compatibility		
Compatible Optimizer	SUN2000-600W-P/SUN2000-450-P2, MERC-1100/1300W-P, Tigo optimizers ⁴	
Standard Compliance (more available upon request)		
Safety	RCM, IEC 62109 -1, IEC 62109 -2, IEC 62116, AS/NZS 60947.3:2015	
Grid Connection Standards	AS/NZS 4777.2:2020	

¹The maximum input voltage is the upper limit of the DC voltage. Any higher input DC voltage would probably damage inverter.

²Any DC input voltage beyond the operating voltage range may result in inverter improper operating.

³EESOLAR-29.9/40KTL-M3 raises potential between PV- and ground to above zero through integrated PID recovery function to recover module degradation from PID. Supported module types include: P-type (mono, poly), N-type (nPERT, HIT)

⁴Please consult the suppliers for the specifications of the optimizer pairing.