

EESOLAR-29.9/40KTL-M3 Smart String Inverter



Smart

8 strings intelligent monitoring



Efficient

Max. efficiency 98.7%



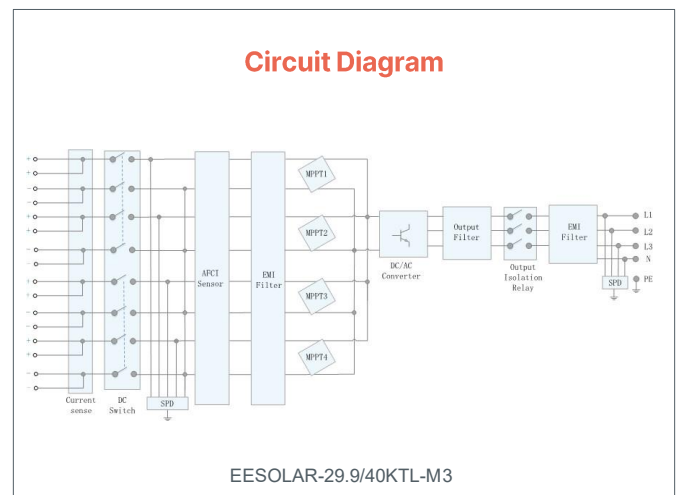
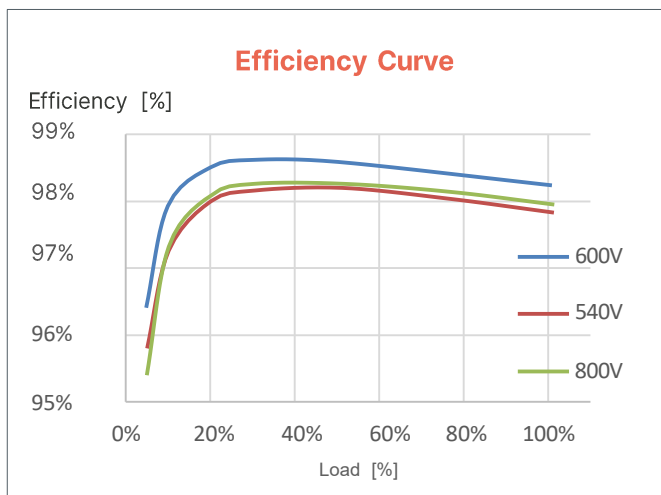
Safe

Fuse free design

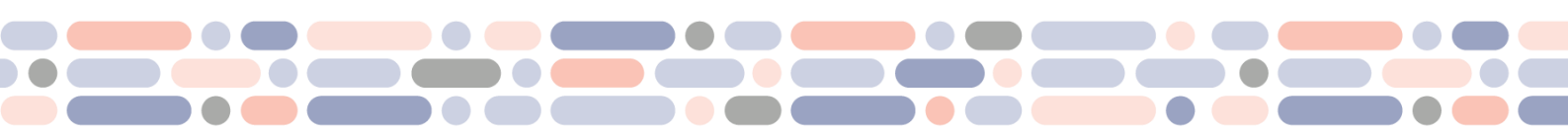


Reliable

Type II surge arresters for DC & AC



EESOLAR-29.9/40KTL-M3



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 ⁴

Standard Compliance (more available upon request)	
Safety	RCM, IEC 62109 -1, IEC 62109 -2, AS/NZS 60947.3:2015
Grid Connection Standards	AS/NZS 4777.2:2020, AS/NZS 4777.2:2015

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.