



Three Phase String Inverter

Trio Inova Series

3 / 4 / 5 / 6 / 7 / 8 / 9 / 10 / 12 / 15

Small Inverter
Big Performance



High Efficiency



Zero Export



Wide Voltage Range



Remote Monitoring



IP65

3.0kW

4.0kW

Trio Inova 3K/Trio Inova 4K/Trio Inova 5K/ Trio Inova 6K/Trio Inova 7K/Trio Inova 8K/ Trio Inova 9K/Trio Inova 10K/Trio Inova 12K/ Trio Inova 15K

Trio Inova Series offers high-efficiency three-phase string inverter solutions designed for commercial and residential applications. With its advanced multiple MPPT architecture, it ensures maximum energy yield across various PV configurations while providing enhanced grid compatibility through a wide output voltage range. Supporting zero export applications, the series meets modern grid requirements with ease. Featuring a compact design and comprehensive protection mechanisms, the Trio Inova Series is an ideal choice for reliable and sustainable solar energy systems.





Trio Inova 3K Trio Inova 4K Trio Inova 5K Trio Inova 6K Trio Inova 7K Trio Inova 8K Trio Inova 9K Trio Inova 10K Trio Inova 12K Trio Inova 15K

PV STRING INPUT DATA

Max. PV Input Power (kW)	4.5	6	7.5	9	10.5	12	13.5	15	18	22.5
Max. PV Input Voltage (V)	1100									
Start-up Voltage (V)	140									
MPPT Voltage Range (V)	120-1000									
Rated PV Input Voltage (V)	600									
Max. Operating PV Input Current (A)	20+20									20+26
Max. Input Short Circuit Current (A)	30+30									30+39
No. of MPP Trackers/ No. of Strings MPP Tracker	2/1+1									2/1+2

AC OUTPUT SIDE

Rated AC Output Active Power (kW)	3	4	5	6	7	8	9	10	12	15
Max. AC Output Apparent Power (kVA)	3.3	4.4	5.5	6.6	7.7	8.8	9.9	11	13.2	16.5
Rated AC Output Current (A)	4.6/4.4	6.1/5.8	7.6/7.3	9.1/8.7	10.7/10.2	12.2/11.6	13.7/13.1	15.2/14.5	18.2/17.4	22.8/21.8
Max. AC Output Current (A)	5/4.8	6.7/6.4	8/4.8	10/9.6	11.7/11.2	13.4/12.8	15/14.4	16.7/16	20/19.2	25/24
Rated Output Voltage/Range (V)	220/380V, 230/400V 0.85Un-1.1Un									
Grid Connection Form	3L/N/PE									
Rated Output Grid Frequency/Range(Hz)	50/45-55, 60/55-65									
Power Factor Adjustment Range	0.8 leading to 0.8 lagging									
Total Current Harmonic Distortion THDi	<3%									
DC Injection Current	<0.5%In									

EFFICIENCY

Max. Efficiency	98.1%	98.2%	98.3%	98.5%
Euro Efficiency	97.5%	97.6%	97.8%	98%
MPPT Efficiency	>99%			

EQUIPMENT PROTECTION

DC Reverse Polarity Protection	Yes
AC Output Overcurrent Protection	Yes
AC Output Overvoltage Protection	Yes
AC Output Short Circuit Protection	Yes
Thermal Protection	Yes
Insulation Impedance Detection	Yes
DC Component Monitoring	Yes
Arc Fault Circuit Interrupter (AFCI)	Optional
Anti-islanding Protection	Yes
Residual Current Detection	Yes
Surge Protection Level	TYPE II(DC), TYPE II(AC)
DC Switch	Yes

INTERFACE

Communication Interface	RS485/RS232
Monitor Mode	GPRS/WIFI/Bluetooth/4G/LAN(optional)

GENERAL DATA

Operating Temperature Range (°C)	-25 to +60°C, >45°C Derating	
Permissible Ambient Humidity	0-100%	
Permissible Altitude (m)	4000m	
Noise (dB)	<45	
Ingress Protection (IP) Rating	IP 65	
Inverter Topology	Non-Isolated	
Over Voltage Category	OVC II(DC), OVC III(AC)	
Cabinet Size (WxHxD mm) (Excluding Connectors and Brackets)	283x525x178	283x525x188
Weight (kg)	11.5	12
Warranty	5 Years	
Type of Cooling	Natural Cooling	
Grid Regulation	IEC 61727, IEC 62116, EN 50549	
Safety EMC/Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2	