

Copernico TT

Photovoltaic inverter
20 to 100 kVA
with transformer



Applications

- Photovoltaic systems connected to low voltage (LV) grids
- Photovoltaic systems connected to medium (MV) grids
- Stand alone photovoltaic plants with storage systems
- Hybrid energy production systems
- Battery discharge systems delivering constant power or current to grid

Benefits

- High European efficiency value, starting from low power levels, to maximise the return on investment.
- Compatibility with all major European and non-European network standards, including BDEW, guaranteeing certification according to local standards.
- Excellent MPPT adjustment efficiency, optimising the energy production in all environmental conditions and at all times.
- Hot parallel function on a single MV or HV transformer, with isolation control before connection, avoiding production losses in the event of problems on part of the plant.
- Ability to deliver reactive power on request, supporting the mains electricity network during transients and overloads.

Main options

- String diode box
- Array monitor
- Green Power Guardian monitoring system
- KNX accessories
- Sensors: radiation, ambient temperature, module temperature, anemometers, etc.

Copernico TT technical data

Rating (kVA)	20	30	50	100
Nominal power (kW)	20	30	50	100
Max PV power (kWp)	24	35	60	120
Dimensions WxDxH (mm)	690x895x1345			800x800x1900
Weight (kg)	475	486	540	905

Input

Maximum voltage	1000 V			
MPPT range voltage	450 ÷ 820 V			
Maximum current (A)	46	69	115	230
Input protection	Isolator PV switch + fuses			Isolator PV switch

Output

Nominal voltage	400 V 3-phase with integrated transformer				
Frequency	50 ÷ 60 Hz				
Power factor	0.99 Cos Ø depending on grid regulation				
Current harmonics (THD)	< 2 % @ nominal power and sinusoidal voltage				
Output protection	Electronic short-circuit protection - fuses - contactor				
Maximum efficiency (%)	>94.12	>95.51	>95.79	>96.28	
European maximum efficiency (%)	>93.20	>94.08	>95.04	>95.79	
Losses under normal operation at rated power	Wh	1150	1350	2100	3720
	BTU	3900	4600	7200	12700

Connectivity and function extensions

Front panel	LCD display, mimic LED panel and keyboard
Remote communication	Modbus RS485

System

Protection degree	IP 20
Colour	RAL 7035
Accessibility	Front access