Fronius Tauro Direct version



besigned to perform.

Product advantages

- 01 Robust and durable
- 02 Lower costs and efficient servicing
- 03 Intelligent control and an open system
- 04 Design flexibility
- 05 Repairable and sustainable

Maximum flexibility in terms of system design with minimal overall system operating costs: the robust Fronius Tauro inverter makes large-scale PV systems even more costeffective. Whether under direct sunlight or in extreme heat, its double-walled housing and active cooling enable full power and maximum yields even under the harshest environmental conditions. At the same time, the sturdy project inverter from Austria is quick to install and maintain. **Fronius Tauro. Designed to perform.**

The solution for large-scale PV systems









01 Robust and durable

Designed to buck direct sunlight and high temperatures: its double-walled housing and active cooling give the Fronius Tauro a long service life and make it a robust commercial solar inverter that will always deliver top performance.

02 Lower costs and efficient servicing

For minimal overall system operating costs: Fronius Tauro is quick to install and efficient to maintain. When servicing is required, only the affected power stage set needs to be replaced rather than the entire project inverter. This makes for safe operation and fast, cost-efficient servicing.

03 Intelligent control and an open system

Like all Fronius products, Fronius Tauro can be conveniently monitored, controlled and maintained from a smartphone or PC. Fronius Solar.web lets you keep an eye on your system at all times. Its open system architecture means third-party components are easily integrated.

04 Design flexibility

Centralised, decentralised, vertical or horizontal: Fronius Tauro offers you maximum flexibility in the design and installation of large-scale PV systems. The flexible Tauro and the cost-effective Tauro ECO can be combined in any way you choose. Pre-integrated surge protection device and AC daisy chaining reduce the need for additional components and cables.

05 Repairable and sustainable

Fronius Tauro shows that sustainability at every stage of the product cycle pays dividends. The project inverter is designed for durability and was developed and produced in Austria with the fewest possible, replaceable components. This makes the Tauro particularly robust and failure-resistant, and means that only individual parts need to be replaced during on-site servicing, thereby saving time and conserving resources.



Fronius Tauro is available in two versions:

- Fronius Tauro | 50 kW | 3 MPP trackers
- Fronius Tauro ECO | 50, 99.99 and 100 kW | 1 MPP tracker

<u>Technical</u> data

				Tauro				Та	uro E	CO				
			50-3-D		50-	99-3-D			100-3-D					
	Number of MPP trackers			3			1		1			1		
	Max. input current (I _{dc max})	A	134			87.5		175		175				
	Max. input current string (I _{dcmax} , string)	A	14.5		14.5		14.5		14.5					
	Max. short circuit current (Isc max, inverter)	A	240		178		365		365					
lata	DC input voltage range (Udc min - Udc max)	V	200 - 1000		580 - 1000		580 - 1000			580 - 1000				
L d	Feed-in start voltage (U _{dc start})	V	200		650		650		650					
Input data	Usable MPP voltage range (Umpp min ⁻ Umpp max)	V	400 - 870		580 - 930		580 - 930			580 - 930				
	Max. PV generator power (P _{dc max})	kWp	75 PV1 PV2 PV3		75 PV1 PV2		150 PV1 PV2 PV3		150 PV1 PV2 PV3		PV3			
	Max. input current module field	A	36	36	72	75	75	75	75	75	75	75	75	
	Max. short circuit current	A	72	72	125	125	125	125	125	125	125	125	125	
	Number of DC connections		4	3	7	7	7	7	7	8	7	7	8	
ŋ	AC nominal output (P _{ac,r})	W	50.000			50.	000	99.990			100.000			
Output data	Max. output power	VA	50.000			50.	000	99.990			100.000			
rt	AC output current (I _{ac nom})	A		76 76 152 15							152			
ltp	Grid connection (U _{ac,r})	V	3~ NPE 400/230; 3~ NPE 380/220											
ō	Frequency (frequency range f _{min} - f _{max}) Power factor (cos φ _{ac,r})	Hz	50 / 60 (45 - 65) 0 - 1 ind. / cap.											
	Dimensions (height x width x depth)	mm	755 × 1109 × 346 (without wall mount)											
	Weight	kg	92			7	103			103				
æ	Degree of protection			IP 65			IP 65		IP 65		IP 65			
General data	Protection class		1			1		1		1				
ald	Night-time consumption	W	< 16 < 16 < 16 < 16											
ler	Cooling		Active Cooling Technologie and Double-Wall System											
3er	Installation		Indoor and outdoor ¹											
	Ambient temperature range	°C	-40 to +65 °C²											
	Certificates and compliance with standards ³		AS/NZS 4777.2:2020 IEC62109-1/-2 VDE-AR-N 4105:2018 IEC62116 EN50549-1:2019 & EN50549-2:2019 VDE-AR-N 4110:2018 CEI 0-16:2019 CEI 0-21:2019											
~	Cable cross section	mm²	÷	35 - 240			- 240	70 - 240		0	70 - 240		0	
log	AC conductor material	ļ	Al and Cu											
ou	Connection terminals		Cable lug or V clamps											
ech	Single Core Option (single core cable)	ļ		Cable gland: 5 x M40 (10 - 28 mm)										
ŭ 2	Multi Core Option (multi core cable)	ļ		Cable gland: 1 x multi core connection Ø 16 - 61.4 mm + 1 x M32										
Connection technology	AC Daisy Chaining Option (single core cable)			Cable gland: 10 x M32 (10 - 25 mm)										
Jne	Cable cross section	mm²	4 - 6											
Cor	AC conductor material Connection terminals			Cu DC-direct connection Stäubli Multi Contact MC4										
Efficiency	Max. efficiency	%		98.5		98	8.5		98.5			98.5		
icie	European efficiency (ηEU)	%	98.3			98.2		98.2	.2 98.2					
Effi	MPP-adaptation efficiency	%		> 99.9		> 99	9.9		> 99.9			> 99.9		
¹ Direct s	sunlight is possible													

 2 Optional AC-disconnect mounted inside the inverter: from -30 to +65 $^\circ\mathrm{C}$

³ These are planned certificates. For the current certificates, please see www.fronius.com/tauro-cert

100-3-D								
integrated, 15 A or 20 A								
Fronius Solar.web, Modbus TCP Sunspec, Fronius Solar API (JSON)								
10/100 Mbit; max. 100 m Fronius Solar.web, Modbus TCP Sunspec, Fronius Solar API (JSON)								
1A @ 5V max. ⁵								
Emergency stop								
Modbus RTU SunSpec								
,								
1A @ 5V max.⁵ Emergency stop								

4 Typ 1 + 2: Iimp 5kA

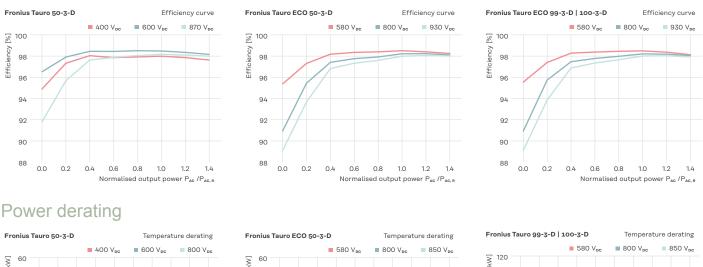
⁵ For power supply only

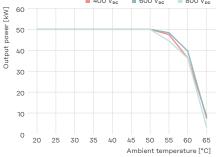
⁶ An Ethernet star-configuration is used for communication with multiple inverters. Each individual inverter communicates independently with the network/Internet via its integrated data logger

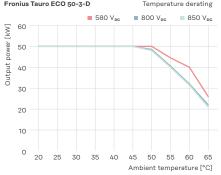
Measurably better

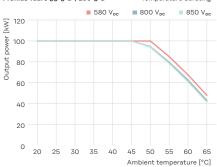
The performance speaks for itself: Fronius Tauro delivers impressive performance, with constant efficiency and maximum output at temperatures up to 50 °C.

Efficiency









For more information about the product, visit: www.fronius.com/tauro

Fronius International GmbH

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