



Designed 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 cost-effective. 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.

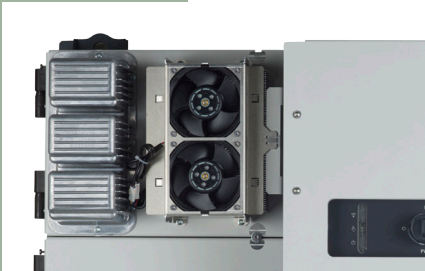
05 Repairable and sustainable

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.

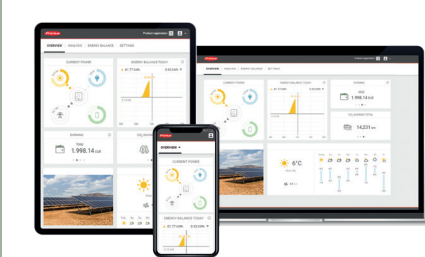
01



02



03



04



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

Technical data

| | | | Tauro | | | Tauro ECO | | | | | | | | |
|--|---|--|--|-----------------------------------|--------|------------------------|----------|------------------------|----------|------------------------|----------|-----|-----|--|
| | | | 50-3-D | | | 50-3-D | | 99-3-D | | 100-3-D | | | | |
| Input data | Number of MPP trackers | | 3 | | | 1 | | 1 | | 1 | | | | |
| | Max. input current ($I_{dc\ max}$) | A | 134 | | | 87.5 | | 175 | | 175 | | | | |
| | Max. input current 20 A string option ($I_{dc\ max, string}$) | A | 14.5 | | | 14.5 | | 14.5 | | 14.5 | | | | |
| | Max. input current 30 A string option ($I_{dc\ max, string}$) | A | 22 | | | 22 | | 22 | | 22 | | | | |
| | Max. short circuit current string option 20 A ($I_{sc\ max, string}$) | A | 20 | | | 20 | | 20 | | 20 | | | | |
| | Max. short circuit current string option 30 A ($I_{sc\ max, string}$) | A | 30 | | | 30 | | 30 | | 30 | | | | |
| | Max. short circuit current ($I_{sc\ max, inverter}$) | A | 240 | | | 178 | | 365 | | 365 | | | | |
| | DC input voltage range ($U_{dc\ min} - U_{dc\ max}$) | V | 200 - 1000 | | | 580 - 1000 | | 580 - 1000 | | 580 - 1000 | | | | |
| | Feed-in start voltage ($U_{dc\ start}$) | V | 200 | | | 650 | | 650 | | 650 | | | | |
| | Usable MPP voltage range ($U_{mpp\ min} - U_{mpp\ max}$) ¹ | V | 400 - 870 | | | 580 ² - 930 | | 580 ² - 930 | | 580 ² - 930 | | | | |
| | Max. PV generator power ($P_{dc\ max}$) | kWp | 75 | | | 75 | | 150 | | 150 | | | | |
| | | | PV1 | PV2 | PV3 | PV1 | PV2 | PV1 | PV2 | PV3 | PV1 | PV2 | PV3 | |
| | Max. input current module array ($I_{dc\ max, pv}$) | A | 36 | 36 | 72 | 75 | 75 | 75 | 75 | 75 | 75 | 75 | 75 | |
| | Max. module array short circuit current ($I_{sc\ pv}$) ³ | A | 72 | 72 | 125 | 125 | 125 | 125 | 125 | 125 | 125 | 125 | 125 | |
| Number of DC connections 20 A option | | 4 | 3 | 7 | 7 | 7 | 7 | 7 | 8 | 7 | 7 | 8 | | |
| Number of DC connections 30 A option | | 4 | 5 | 5 | 4 | 5 | 4 | 5 | 5 | 4 | 5 | 5 | | |
| Output data | AC nominal output ($P_{ac,r}$) | W | 50.000 | | | 50.000 | | 99.990 | | 100.000 | | | | |
| | Max. output power | VA | 50.000 | | | 50.000 | | 99.990 | | 100.000 | | | | |
| | | | 380VAC | 400VAC | 380VAC | 400VAC | 380VAC | 400VAC | 380VAC | 400VAC | | | | |
| | AC output current ($I_{ac\ nom}$) | A | 75.8 | 72.5 | 75.8 | 72.5 | 151.5 | 144.9 | 151.5 | 144.9 | | | | |
| | Grid connection ($U_{ac,r}$) | V | 3~ (N)PE 400/230; 3~ (N)PE 380/220 | | | | | | | | | | | |
| | Frequency (frequency range $f_{min} - f_{max}$) | Hz | 50 / 60 (45 - 65) | | | | | | | | | | | |
| Power factor ($\cos \varphi_{ac,r}$) | | 0 - 1 ind. / cap. | | | | | | | | | | | | |
| General data | Dimensions (height x width x depth) | mm | 755 x 1109 x 346 (without wall mount) | | | | | | | | | | | |
| | Weight | kg | 92 | | | 74 | | 103 | | 103 | | | | |
| | Degree of protection | | IP 65 | | | IP 65 | | IP 65 | | IP 65 | | | | |
| | Protection class | | 1 | | | 1 | | 1 | | 1 | | | | |
| | Night-time consumption | W | < 16 | | | < 16 | | < 16 | | < 16 | | | | |
| | Cooling | | Active Cooling Technologie and Double-Wall System | | | | | | | | | | | |
| | Installation | | Indoor and outdoor ⁴ | | | | | | | | | | | |
| | Ambient temperature range | °C | -40 to +65 °C ⁵ | | | | | | | | | | | |
| | Certificates and compliance with standards ⁶ | | 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 IEC 63027:2023 | | | | | | | | | | | |
| | Life cycle analysis | | For Tauro ECO 100 in accordance with Austrian standards ÖNORM EN ISO 14040 and 14044 (verified by Fraunhofer IZM) | | | | | | | | | | | |
| Connection technology | AC | Cable cross section | mm ² | 35 - 240 | | | 35 - 240 | | 70 - 240 | | 70 - 240 | | | |
| | | AC conductor material | | Al and Cu | | | | | | | | | | |
| | | Connection terminals | | Cable lug or V clamps | | | | | | | | | | |
| | | Single Core Option (single core cable) | | Cable gland: 5 x M40 (10 - 28 mm) | | | | | | | | | | |
| | Multi Core Option (multi core cable) | | Cable gland: 1 x multi core connection Ø 16 - 61.4 mm + 1 x M32 | | | | | | | | | | | |
| | AC Daisy Chaining Option (single core cable) | | Cable gland: 10 x M32 (10 - 25 mm) | | | | | | | | | | | |
| | DC | Cable cross section | mm ² | 4 - 6 | | | | | | | | | | |
| DC conductor material | | | Cu | | | | | | | | | | | |
| Connection terminals | | | DC-direct connection Stäubli Multi Contact MC4 | | | | | | | | | | | |
| Efficiency | Max. efficiency | % | 98.5 | | | 98.5 | | 98.5 | | 98.5 | | | | |
| | European efficiency (η_{EU}) | % | 98.3 | | | 98.2 | | 98.2 | | 98.2 | | | | |
| | MPP-adaptation efficiency | % | > 99.9 | | | > 99.9 | | > 99.9 | | > 99.9 | | | | |

¹ The usable MPP voltage range is identical to the MPP voltage range at rated power ² At 230 V actual mains voltage; design recommendation ($U_{mpp\ min}$): 600V, ³ $I_{sc\ pv} = I_{sc\ max} \geq I_{sc\ (STC)} \times 1.25$ according to e.g. IEC 60364-7-712, NEC 2020, AS/NZS 5033:2021., ⁴ Direct sunlight is possible, ⁵ Optional AC-disconnect mounted inside the inverter: from -30 to +65 °C ⁶ These are planned certificates. For the current certificates, please see www.fronius.com/tauro-cert

| | | Tauro | | Tauro ECO | |
|--------------------|---|--|---------------------------------|---------------------------------|---------------------------------|
| | | 50-3-D | 50-3-D | 99-3-D | 100-3-D |
| Protection devices | DC disconnector | integrated | | | |
| | RCMU | integrated | | | |
| | DC insulation measurement | integrated | | | |
| | Arc fault circuit interrupter (Fronius Arc Guard) | Optional (for 20 A option only) | Optional (for 20 A option only) | Optional (for 20 A option only) | Optional (for 20 A option only) |
| | DC/AC surge protection | Type 1 + 2 integrated ⁷ , Type 2 optional | | | |
| | string fuse | integrated, 20 A or 30 A | | | |
| Interfaces | Wi-Fi | Fronius Solar.web, Modbus TCP Sunspec, Fronius Solar API (JSON) | | | |
| | Ethernet LAN RJ45 ⁸ | 10/100 Mbit; max. 100 m Fronius Solar.web, Modbus TCP Sunspec, Fronius Solar API (JSON) | | | |
| | Wired Shutdown (WSD) | Emergency stop | | | |
| | 2 x RS485 | Modbus RTU SunSpec | | | |
| | 6 digital inputs / 6 digital I/Os | Programmable interface for ripple control receiver, energy management, load control | | | |
| | Datalogger and Webserver ⁸ | Integrated | | | |

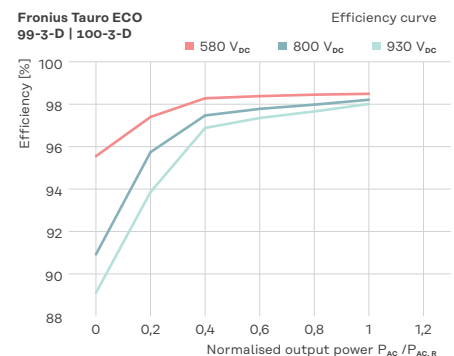
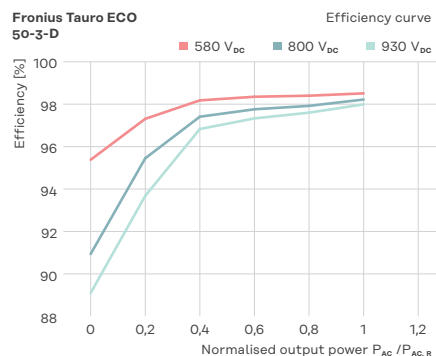
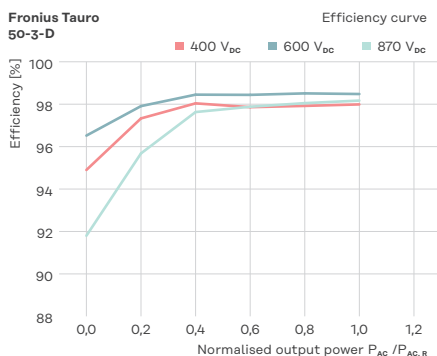
⁷ Typ 1 + 2: I_{imp} 5kA

⁸ 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

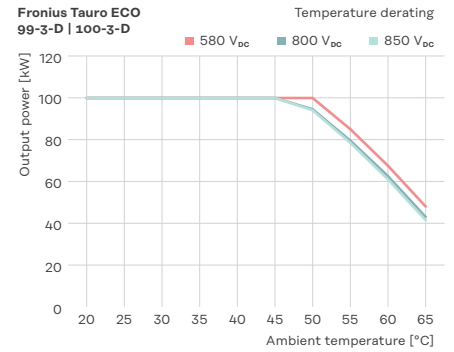
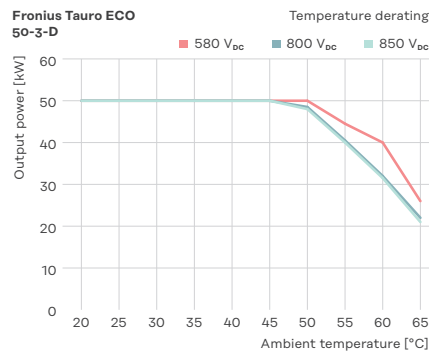
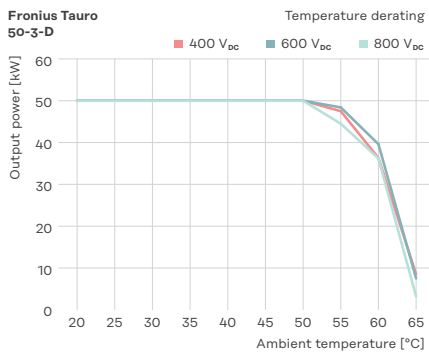
Measurably better

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

Efficiency



Power derating



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

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EN V05 Dec 2023

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