



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



02



03



04



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

Technical data

Fronius Tauro. Designed to perform.

| | | | Tauro | | | Tauro ECO | | | | | | |
|--------------------------|--|--|---|---|-----|------------|----------|------------|----------|------------|----------|--|
| | | | 50-3-P | | | 50-3-P | | 99-3-P | | 100-3-P | | |
| Input data | Number of MPP trackers | | 3 | | | 1 | | 1 | | 1 | | |
| | Max. input current ($I_{dc\ max}$) | A | 134 | | | 87.5 | | 175 | | 175 | | |
| | Max. short circuit current ($I_{sc\ max}$, inverter) | A | 240 | | | 178 | | 250 | | 250 | | |
| | 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 ($U_{mpp\ min} - U_{mpp\ max}$) | V | 400 - 870 | | | 580 - 930 | | 580 - 930 | | 580 - 930 | | |
| | Max. PV generator power ($P_{dc\ max}$) | kWp | 75 | | | 75 | | 150 | | 150 | | |
| | | | PV1 | PV2 | PV3 | PV1 | PV2 | PV1 | PV2 | PV1 | PV2 | |
| | Max. input current module field | A | 36 | 36 | 72 | 75 | 75 | 100 | 100 | 100 | 100 | |
| | Max. short circuit current | A | 72 | 72 | 125 | 125 | 125 | 125 | 125 | 125 | 125 | |
| Number of DC connections | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | |
| 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 | | |
| | AC output current ($I_{ac\ max}$) | A | 76 | | | 76 | | 152 | | 152 | | |
| | Grid connection ($U_{ac,r}$) | V | 3~ NPE 400/230; 3~ NPE 380/220 | | | | | | | | | |
| | Frequency (frequency range $f_{min} - f_{max}$) | Hz | 50 / 60 (45 - 65) | | | | | | | | | |
| | Power factor ($\cos \phi_{ac,r}$) | | 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 ¹ | | | | | | | | | |
| | Ambient temperature range | °C | -40 to +65 °C ² | | | | | | | | | |
| | 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 | | | | | | | | | |
| 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 | 25 - 95 | | | | | | | | |
| | | AC conductor material | | Al and Cu | | | | | | | | |
| | | Connection terminals | | Cable lug or V clamps Cable gland: 6 x M40 (10 - 28 mm) | | | | | | | | |
| 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 Direct sunlight is possible

² Optional AC-disconnect mounted inside the inverter: from -30 to +65 °C

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

| | | Tauro | Tauro ECO | | |
|--------------------|---------------------------------------|--------|--|--------|---------|
| | | 50-3-P | 50-3-P | 99-3-P | 100-3-P |
| Protection devices | DC disconnector | | integrated | | |
| | Overload behaviour | | Operating point shift, power limitation | | |
| | Reverse polarity protection | | integrated | | |
| | RCMU | | integrated | | |
| | DC insulation measurement | | integrated | | |
| | DC/AC surge protection | | Type 1 + 2 integrated ⁴ , Type 2 optional | | |
| Interfaces | Wi-Fi | | Fronius Solar.web, Modbus TCP Sunspec, Fronius Solar API (JSON) | | |
| | Ethernet LAN RJ45 ⁶ | | 10/100 Mbit; max. 100 m Fronius Solar.web, Modbus TCP Sunspec, Fronius Solar API (JSON) | | |
| | USB (type A socket) | | 1A @ 5V max. ⁵ | | |
| | 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 ⁶ | | Integrated | | |

⁴ Typ 1 + 2: Iimp 5kA

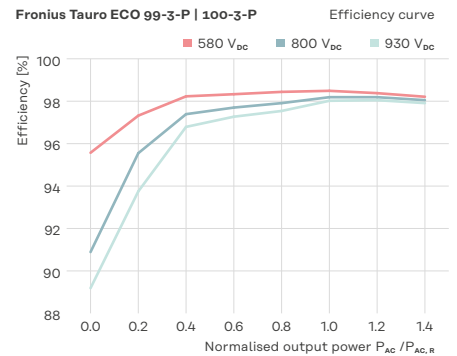
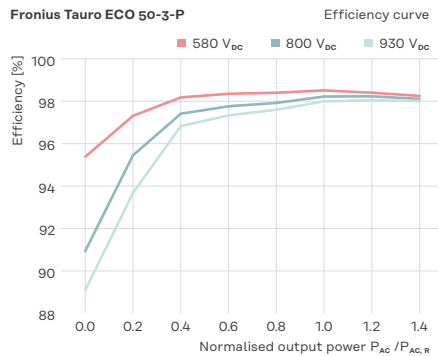
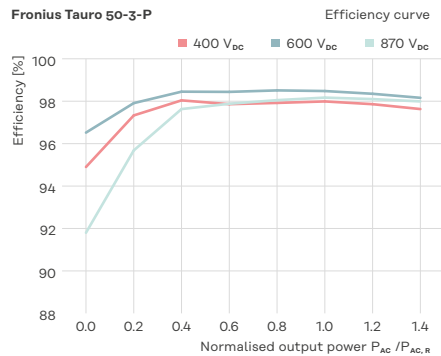
⁵ For power supply only

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

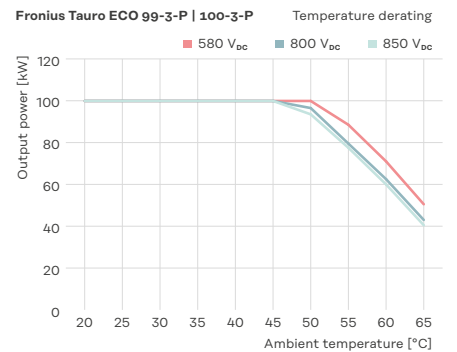
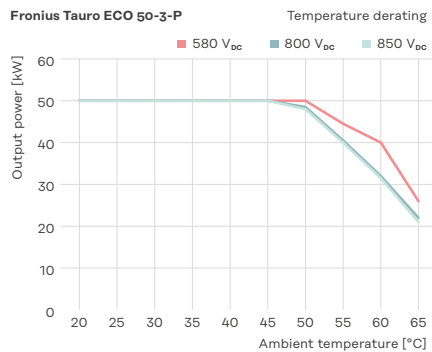
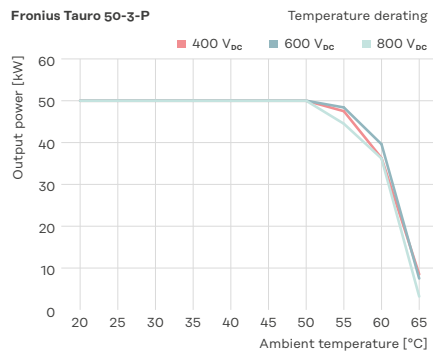
Measurably better

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

Efficiency



Power derating



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

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