



EI Inverter and EI Link



A hybrid inverter, part of GO Optimized ESS (Energy Storage System) for Europe

The hybrid Tigo EI Inverter and EI Link are the centerpiece of the GO Optimized Energy Storage System (ESS)

- Single- and three-phase options up to 15 kW
- Comprehensive Energy Management with the Tigo EI App when paired with GO Battery
- Integrated module level monitoring, optimization and rapid shut down when paired with Tigo TS4 MLPE
- Up to 150% PV input power
- Integrated full home backup

EI Inverter

| | Single Phase | | | | Three Phase | | |
|---|-------------------------|-------------------|----------------------|---------------------|---------------------------------|----------------------|----------------------|
| | 3K1D | 3.7K1D | 5K1D | 6K1D | 6K3D | 10K3D | 15K3D |
| DC Input | | | | | | | |
| MPPTs | 2 | | | | 2 | | |
| Strings per MPPT | 1 | | | | 1 | 2 ¹ | |
| Max. PV power (PV1 + PV2) | 4.5 kW | 5.5 kW | 7.5 kW | 9 kW | 10 kW | 16.5 kW ² | 18 kW ³ |
| Max. PV voltage | 600 V | | | | 1000 V | | |
| Startup voltage | 90 V | | | | 200 V | | |
| MPPT operating voltage | 70 – 550 V | | | | 180 – 950 V | | |
| Max. Current per MPPT (I_{MP}) ⁴ | 16 A | | | | 16 A | 28 A/16 A | |
| Max. Current per MPPT (I_{SC}) ⁴ | 20 A | | | | 20 A | 35 A/20 A | |
| AC On Grid | | | | | | | |
| Max. input power | 6.3 kVA | 7.36 kVA | 9.2 kVA | | 12 kVA | 20 kVA | |
| Max. input current | 60 A | | | | 63 A | | |
| Nominal output power | 3 kW | 3.680 kW | 5 kW ⁵ | 6 kW | 6 kW | 10 kW | 15 kW |
| Max. output power | 3.3 kVA | 3.68 kVA | 5.5 kVA ⁵ | 6.6 kVA | 6.6 kVA | 11 kVA | 15 kVA |
| Max. output current | 14.4 A | 16 A | 23.9 A ⁵ | 28.6 A | 9.7 A | 16.1 A | 24.1 A |
| Nominal voltage | 220 V, 230 V, 240 V | | | | 415/240 V, 400/230 V, 380/220 V | | |
| Grid frequency | 50 – 60 Hz | | | | 50 – 60 Hz | | |
| Power factor | 0.8 leading and lagging | | | | 0.8 leading and lagging | | |
| THDi | <2% | | | | <3% | | |
| AC Off Grid | | | | | | | |
| Nominal output power | 3 kW | 3.680 kW | 5 kW | 6 kW | 6 kW | 10 kW | 15 kW |
| Peak apparent power | 3.6 kVA, 1 hr. | 4.4 kVA, 1 hr. | 6 kVA, 1 hr. | 7.2 kVA, 10 min. | 9 kVA, 60 sec. | 15 kVA, 60 sec. | 16.5 kVA, 60 sec. |
| Max. Continuous current | 13 A | 16 A | 21.7 A | 26.1 A | 8.7 A | 14.5 A | 21.8 A |
| THDv | <2% | | | | <3% | | |
| Switchover time | <0.25 sec. | | | | <2 sec. | | |

¹ In first MPPT.

² MPPT 1: 10.5 kW/ MPPT 2: 6 kW

³ MPPT 1: 11 kW/ MPPT 2: 7 kW

⁴ TSI-10K3D and TSI-15K3D have different capacities for MPPT1/MPPT2.

⁵ Germany: VDE4105 rating: 4.6kW, 4.6kVA, 20A.

More Resources



EI Inverter

| General | | | |
|-----------------------------|--|--------------------|----------------|
| MPPT efficiency | >99% | >99% | |
| Max./Euro efficiency | 97.6%/97.0% | 98.2%/97.7% | |
| Standby consumption @night | <3 W | <5 W | |
| Noise | <30 dB | <40 dB | <45 dB |
| Cooling | Natural convection | Natural convection | Forced airflow |
| Dimensions (W x H x D) | 482 x 417 x 181 mm | 503 x 503 x 199 mm | |
| Weight | 22 kg | 34 kg | |
| Operating temperature range | -35 – 60 °C (derating >45) | | |
| Storage temperature range | -40 – 70 °C | | |
| Max. Operating altitude | 3000 m | | |
| Humidity | 0 – 100% non-condensing | | |
| Communications | RS-485, Ethernet, WiFi | | |
| Enclosure rating | IP65 | | |
| Compliance | | | |
| Safety | IEC 62109-1/-2 | | |
| EMC | EN 61000-6-1/2/3/4; EN 61000-3-2/3/11/12 | | |
| Standards | VDE 0126-1-1 A1:2012/VDE-AR-N 4105/G98/G99/ AS 4777/EN 50549-1:2019/CEI 0-21 | | |

EI Link

| | Single Phase TSS-1PS | Three Phase TSS-3PS |
|------------------------------|---------------------------------|--------------------------------|
| Load | | |
| Rated voltage/frequency | 220 V, 230 V, 240 V/50 – 60 Hz | 380 V, 400 V, 415 V/50 – 60 Hz |
| Max. Input current | 60 A | 63 A |
| General | | |
| Overvoltage protection AC/DC | III/II | |
| Enclosure rating | IP54 | |
| Operating temperature range | -35 – 60 °C (derating >45) | |
| Storage temperature range | -40 – 70 °C | |
| Max. Operating altitude | 3000 m | |
| Humidity | 0 – 100% non-condensing | |
| Cooling | Natural convection | |
| Dimensions (W x H x D) | 482 x 437 x 184.5 mm | 500 x 512 x 204.5 mm |
| Weight | 10 kg | 10 kg |

Ordering Information

| Single Phase | | Three Phase | |
|-------------------------|-----------------------------------|---------------------|---------------------------------|
| Model Number | Description | Model Number | Description |
| TSI-3K1D | EI Inverter – 3 kW single-phase | TSI-6K3D | EI Inverter – 6 kW three-phase |
| TSI-3.7K1D ¹ | EI Inverter – 3.7 kW single-phase | TSI-10K3D | EI Inverter – 10 kW three-phase |
| TSI-5K1D | EI Inverter – 5 kW single-phase | TSI-15K3D | EI Inverter – 15 kW three-phase |
| TSI-6K1D | EI Inverter – 6 kW single-phase | TSS-3PS | EI Link – three-phase |
| TSS-1PS | EI Link – single-phase | | |

¹ UK only.