



# EI Automatic Transfer Switch (ATS) 50A, 200A, 200A w/generator support

The Tigo ATS is a required component for a Tigo EI Residential Solar Solution grid-tied energy storage solution (ESS). When the ATS detects a loss of grid power, it quickly and safely switches to solar/battery/ generator power only. It then restores normal grid-tied operations when power returns.

# Benefits

- Enables automated whole-home or essential-load backup
- Supports increased backup power and duration by connecting a home generator (TSS-200-US-G)
- Provides comprehensive monitoring data with the Tigo EI mobile app and portal
- Reduces main panel upgrades and derating with integrated service disconnects (200A models)

### Features

- 120V<sub>AC</sub> and 240V<sub>AC</sub> split-phase output
- Manual bypass switch
- NEMA 4X/IP65 enclosure dust/watertight
- Main circuit breaker (200A) and main lug only (50A) panelboards
- Pure sine wave generator support up to 24kW with 2-wire start (TSS-200-US-G)

### Models

| Description                         | Name         | Part Number     |
|-------------------------------------|--------------|-----------------|
| 50A ATS main lug only (MLO)         | TSS-50-US    | 604-00050-00    |
| 200A ATS main circuit breaker (MCB) | TSS-200-US   | 801-200200-0201 |
| 200A ATS MCB w/generator support    | TSS-200-US-G | 801-200200-0301 |

# **Physical Specifications**

|                       | TSS-50-US TSS-200-US/TSS-200-US-G |                                     |  |
|-----------------------|-----------------------------------|-------------------------------------|--|
| Height/width/depth    | 18.9/10.8/4.1in<br>480/275/105mm  | 17.91/21.65/9.65in<br>455/550/245mm |  |
| Weight                | 34.3lbs./15.6kg                   | 65lbs./29.5kg                       |  |
| Operating temperature | -13 – 122°F<br>-25 – 50°C         | -40 – 122°F<br>-25 – 50°C           |  |
| Operating humidity    | Up to 100%                        |                                     |  |
| Maximum elevation     | 9842ft/3000m                      |                                     |  |
| Noise                 | <25dB                             | <35dB                               |  |

# Certifications



- TSS-50-US UL 1741, CSA C22.2 No. 107.1
- TSS-200-US/G UL 1741, UL 869A, CSA 22.2 No. 107.1, CSA 22.2 No. 0.19

#### Resources



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| Specifications                       | TSS-50-US              | TSS-200-US/G |
|--------------------------------------|------------------------|--------------|
| Inverter Input                       |                        |              |
| # of inverter inputs                 | 1                      |              |
| Nominal voltage                      | 240V                   |              |
| Nominal frequency                    | 50/60Hz                |              |
| Maximum power                        | 11400W                 |              |
| Maximum continuous current           | 48A                    |              |
| Rated AC power from backup           | 10,000W                | 11,400W      |
| Maximum AC power from backup         | 11,400W                |              |
| Rated continuous current from backup | 42A                    | 48A          |
| Maximum AC current from backup       | 48A                    |              |
| AC circuit breaker                   | No                     | 60A          |
| Grid                                 |                        |              |
| Nominal voltage                      | 240V                   |              |
| Operating voltage range (L-L)        | 180-270V               |              |
| Nominal frequency                    | 50/60Hz                |              |
| AC frequency range                   | 45-65Hz                |              |
| Maximum power                        | 12,000VA               | 48,000VA     |
| Maximum continuous input current     | 48A                    | 160A         |
| Maximum input current                | 48A                    | 200A         |
| Grid to inverter switchover time     | <2s                    | <500ms       |
| Output (single phase)                |                        |              |
| Rated power (L-L)                    | 10,000VA               |              |
| Rated power (L-N)                    | 5,000VA                |              |
| Output voltage                       | 120/240V <sub>AC</sub> |              |
| Maximum continuous current (L-N)     | 25A@120V <sub>AC</sub> |              |
| Maximum continuous current (L-L)     | 48A@240V <sub>AC</sub> |              |
| Imbalance compensation during backup | 3000W                  |              |
| General                              |                        |              |
| Cooling                              | Natural convection     |              |
| Ingress protection                   | NEMA 4X (IP65)         |              |
| Installation                         | Wall mount             |              |
| Warranty                             | 10 Years               |              |
| Manual control bypass switch         | No                     | Yes          |
| Communications                       | No                     | RS-485       |
| Energy meter inport/export           | No                     | ±1% accuracy |
| Noise                                | <25dB                  | <35dB        |

| Generator Support*                                | TSS-200-US-G only  |
|---|--------------------|
| Maximum rated AC power                            | 24,000W            |
| Maximum continuous input current                  | 100A               |
| Nominal voltage                                   | 240V               |
| Operating voltage range (L-L)                     | 180-270V           |
| Nominal frequency                                 | 60Hz               |
| Operating frequency range                         | 45-65Hz            |
| Operating frequency range during battery charging | 55-65Hz            |
| Dry contact switch voltage rating                 | 250V <sub>AC</sub> |
| Dry contact switch current rating                 | 5A                 |
| 2-wire start                                      | Yes                |
| Off-grid to generator switchover time             | <500ms             |
| Generator to off-grid switchover time             | <600ms             |





- 1 Inverter communications terminals
- 2 Manual bypass jumper
- 3 Generator start signal terminals
- 4 Inverter AC terminals
- 5 Neutral busbar
- 6 Ground busbar
- 7 Manual bypass switch
- 8 200A service disconnect
- 9 Generator and load terminals
- 10 Grid terminals
- 11 Generator starter battery
  - charger terminal

\* Generator requirements:

- Pure sine wave output.A two-wire start signal circuit.
- Capacity ≥ inverter wattage (maximum 24,000kW).