



Tigo GO Junction

Application Notes

Purpose

The purpose of this document is to explain how homeowners can use the Tigo GO Junction and EI App to manage their heat pump.

Compatibility

GO Junction enables integration of heat pump as part of Tigo EI solution. GO Junction is compatible with any heat pump that accept dry-contact activation signal, including SG-ready heat pump.

App Feature

The Tigo EI App is designed to offer a simple and intuitive user interface. On the heat pump operation configuration page, users can choose between two different modes.

Boost mode (manually activate heat pump high energy consumption) - Refer to Pic. 1.

- This boost mode is enforced by schedule. There are two ways to edit time window once this mode is enabled: slide bar and digital input
- Boost mode is to encourage heat pumps to consume more energy, normally used when homeowner has a routine schedule and knows when there are excess PV.

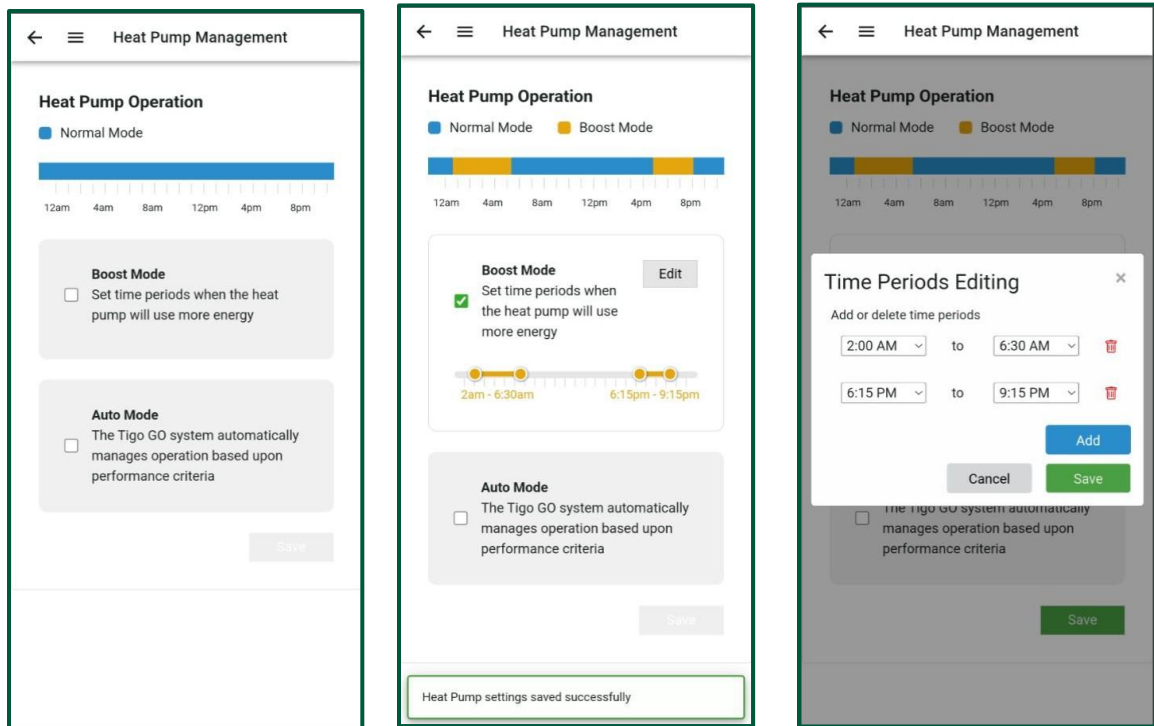
Auto mode - Refer to Pic. 2.

- Auto mode and boost mode can be both toggled at the same time, in which case time schedule takes priority when boost mode is enabled. Auto mode only work outside of time window set in the boost mode.
- In auto mode, when to enter boost is depending on ESS criteria, defined in the Heat Pump Management section of the Tigo EI app or web portal.
- There are two parameters that determine when to enter/exit boost. When export power is more than threshold (default 2000W) for continuous 30s, it enters boost. When import power (default 1000W) is more than threshold for 5s, it exits boost.

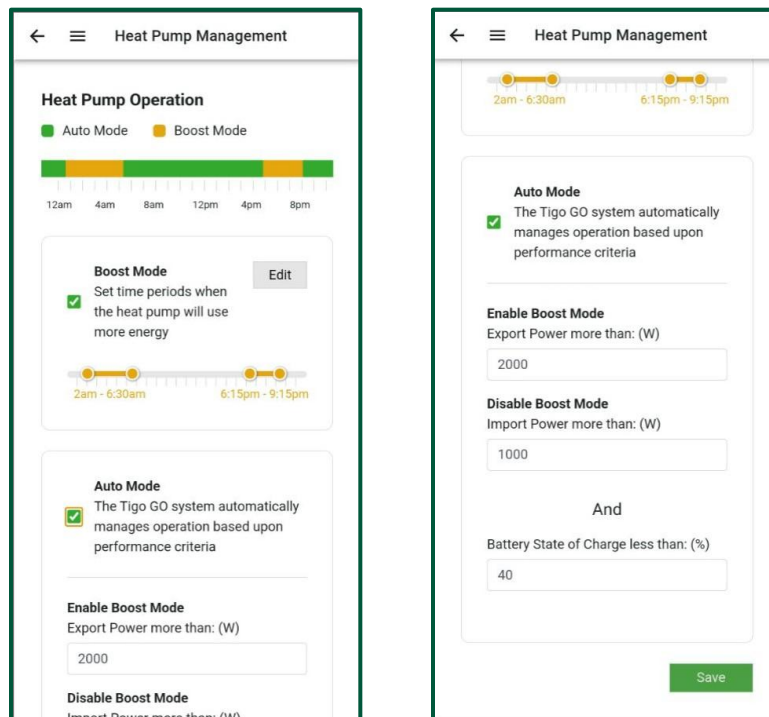
Additional Notes

- Once entering boost mode, it will maintain boost for at least 10 mins before exiting. Exit trigger occurs during the 10 mins will be ignored. Once 10 mins requirement is met and then the exit trigger occurs, it will exit boost.

- The logic for export and import works w/ and w/o battery. With battery, the ESS will treat the HP as a normal home load.
- If there is a battery in the system and the battery SOC is lower than the reserved SOC setting in the battery management page, it exit boost as well.



Pic. 1 Boost mode configuration



Pic. 2 Auto mode configuration