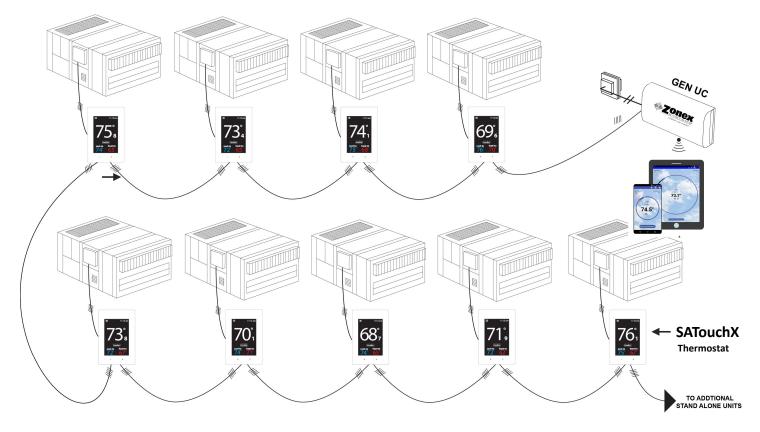


GEN UC SYSTEM OVERVIEW & COMPONENT SELECTION GUIDE



The *GEN UC* is a microprocessor based, digital controller designed to communicate over a network or remotely through the internet that controls stand alone Gas / Electric or Heat Pump units, either RTU's or Split type systems. The *GEN UC* will communicate and control up to 20 **SATouchX**. The GEN UC can be managed via an App (iOS or Android) on your mobile device or a computer's browser and can be accessed over your local area network (LAN) or the internet from ANYWHERE.

The *GEN UC RM* controllers are used to expand your system to control multiple stand alone units remotely. *GEN UC* can support up to 20 **RM** expansion controllers providing control of up to 400 RTU's or split systems.

The *GEN UC* mobile App allows for a wide range of system control and changeover strategies, allowing the contractor to tailor the *GEN UC* system to a specific application. Additional features include Morning warm up and thermostat lock out. An integrated clock allows for setup, night setback and vacation scheduling, globally or individually for each thermostat, with selectable 2 to 8 hour override, along with a feature to remotely lock each thermostat independently in the system. A unique system tool provides the installing contractor with a simple startup diagnostic to quickly alert and identify any system wiring errors, all from the palm of your hand using the *GEN UC* mobile App.

Each **SATouchX** is equipped with return air, supply air, and humidity sensors which reports this information to the GEN UC. The SATouchX is hard wired to the unit and communicates back to the **GEN UC** via the RS-485 communication link. The **GEN UC** system operates over a plenum rated two wire data link, along with two 24vac power wires all daisy chained from **SATouchX** to **SATouchX** with no home run wiring required.



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Step 1: Select ONE system controller per 20 RTUs or split systems.



GEN UC



GEN UC-RM

- <u>GEN UC</u> Wifi App Based Main Controller (Apple or Android or Any Web Browser)
- Universal For GE or HP Units
- 20 Thermostats per controller, up to 400 thermostats
- Alarming via e-mail
- Night Setback Energy Savings for Unoccupied Periods
- Setback with 2 Hour Override
- Globally Lock stats Remotely
- Startup Diagnostic To Troubleshoot Wiring Problems
- · No Home Run Wiring
- <u>GEN UC RM</u> An Expansion Controller Board Used to Increase the Number of Standalone RTUs or Splits by up to 20 per Controller.

Step 2: Select the number of stats, ONE stat per standalone unit.



SATouchX

- <u>SATouchX</u> Wired 2 Stage Heat/Cool, Gas Electric/Heat Pump/ Electric
 - (Remote Sensor Option Part #:SATOUCHXRS)
- Auto-Changeover Control
- Calibrate Room Temperature
- Supply Air/Return Air/Relative Humidity Reporting
- Lock Set Point
- ON/AUTO Fan Setting

Step 3: Select the communication wire:





- <u>STPR</u> 500' Roll of Unshielded Plenum Rated Twisted Pair
- One Roll of Communications Wire per 8 stats



GEN UC COMPONENT SELECTION GUIDE

Step 4: Select the number of RLYX to control generic loads (if necessary):



- <u>RLYX</u> Control and Schedule up to 5 Generic Loads (fans, lights, etc.) per RLYX
- 5 Single Pole Single Throw Relays
- 2A at 24 VAC
- Relays for RLYX are Pilot Duty ONLY
- 24 VAC

Final Step: Select the number of transformers:



TR100



TR40

- TR100 System Transformer (with manual reset circuit breaker)
- 100 VA
- TR40 Transformer RLY X
- 40 VA
- 120 VAC Primary / 24 VAC Secondary
- 50/60 Hz
- One TR100 per GEN UC/RM control board. One TR40 per RLY X

For more information click on the following:

GEN UC Flyer

GEN UC App Video

Installation and Operation Manual

Submittals

WIRED Systems