

SimplControls

Node Specifications

SimplGateway

SimplMeter

SimplThermostat

SimplLighting

SimplRelay

SimplGateway	SimplGateway Wireless Building Management Controller
Model Number	SimplGateway
Voltage Requirements	Single Phase 100VAC to 300VAC and 0.2A
Dimensions	5.2" W x 3.4" H x 1.8" D
Environmental	Indoor Installations Only. 50 °C, Non-condensing Humidity
Storage Temperature	-30 °C to 60 °C
Communication Protocol	Private Wi-Fi Mesh Network based on Simpl Global's patent-pending technology Uses Simpl's proprietary communication protocol
Options	SimplGateway-0001: Adds 4G communications using AT&T and Verizon Wireless networks SimplGateway-0002: Adds WiFi mesh extender for Simpl's private WiFi network
Setting and Capabilities	• Single connection point of the entire system to the Internet using site Wi-Fi or 4G cellular connectivity • Self-commissioning by directly connecting to Simpl's server systems. • Connects to individual SimplControls nodes upon power-up. • Real-time assessment of peak power and the opportunities to shed loads as required based on a user-specified priority list. • Connects to legacy control systems using BACnet connectivity and SimplBACnet.

SimplMeter	SimplMeter		
	Wireless Real-time Power and Energy Measurement		
Model Number	SimplMeter-S		SimplMeter-D
Number of Meters	1		2
Current Transformers	Meter is equipped with two, 1"-diameter CTs		Each Meter is equipped with two, 1"-diameter CTs
Phase/Meter	Split phase or 3-phase		
Voltage Range	100VAC to 480VAC (module is powered by phase A to Neutral)		
Current Range with Different Size Rope CTs	1" Diameter CT 10 -100 A	4" Diameter CTs 10-1000A	8" Diameter CTs 10-5000A
Dimensions	5.2" W x 3.4" H x 1.8" D		
Environmental	Indoor Installations Only. 50 °C, Non-condensing Humidity		
Storage Temperature	-30 °C to 60 °C		
Communication Protocol	Private Wi-Fi Mesh Network based on Simpl Global's patent-pending technology Uses Simpl's proprietary communication protocol		
Options	SimplMeter-0002: Add 1"-Diameter CTs SimplMeter-0003: Replace or Add 4"-Diameter CTs SimplMeter-0004: Replace of Add 8"-Diameter CTs		
Settings and Capabilities	- No Calibration is required - Field-calibrated for higher than 0.5% accuracy using a Calibration system provided by Simpl. - Real-time voltage, current, power factor, power and energy measurements on each individual phase		

SimplThermostat	SimplThermostat Peak Power Reducing Thermostat for Multistage RTU, Air Handler or Heat Pump	
Model Number	SimplThermostat-0000	
Installation	Designed to be Installed in the HVAC RTU, Heat Pump and Air Handling Equipment	
Wireless, External and Attached Sensors	- Human Presence (External sensor) - CO2 Sensor with fan control (optional on board) - Door monitor (on board) - Temperature (SimplTRHL) - Relative Humidity (SimplTRHL) - Light intensity (on board) - Up to three Thermistor inputs (Simpl Thermistors only)	
Five (5) HVAC Control Relays	Five, 2A Relays are software configured for various types of HVAC RTUs and Heat Pumps. The HVAC type is software-selectable	
Power (R-C)	Min: 24VAC at 0.2 A max Max: 35VAC	
Relays	Same Voltage as Power at up to 2A	
Dimensions	5.2" W x 3.4" H x 1.8" D	
Environmental	Indoor Installations Only. 50 °C, Non-condensing Humidity	
Storage	-30 °C to 60 °C	
Communication Protocol	Private Wi-Fi Mesh Network based on Simpl Global's patent-pending technology Uses Simpl's proprietary communication protocol	
User Interface	Simplweb UI interface available on all computers and devices	
Human Interface	3 ½" Touchscreen is optional	
Optional Backplate	Customized backplate is available.	
Stand-alone Ops	Capable of operating stand-alone. All parameters are stored locally after initialization including a real-time clock and weekly schedules.	
Misc. Thermostat Parameters	- Multistage RTU, Air Handler or Heat Pump - Modes: Auto, Heat, Cool - Fan: Auto, On, Off, CO2 sensor with Fan Control - Temperature Settings: Heat and Cool when Occupied and Unoccupied - System Health: Requires both Return and Supply Sensing - Power Shedding Priority for Peak Power Management	
Settings and Capabilities	- CO2 Sensor option with 0-10V fan control - Optimal Start and Stop times - Max override time and temperature range for local controls - Heat pump outside temperature lockout - Heat pump auxiliary heat setting for electric or gas - Minimum outside temperature lockout for cooling - Maximum outside temperature lockout for heating	

SimplLighting	SimplLighting Network Lighting Controls	
Model Number	SimplLighting-S	SimplLighting-Q
Number of Relays	1	4
Current per Relay (A)	20A 2-Coil Latching Relays (Relays are rated at 50A)	
Load Voltage	Up to 277VAC	
System Power	120VAC, less than 0.25A	
Auxiliary Sensors	• Human Presence (on board) • Door monitor (on board) • Temperature (SimplTRHL) • Relative Humidity (SimplTRHL) • Light intensity (on board) • up to three Thermistor inputs (Simpl Thermistors only)	
Dimensions	6.3" W x 4.8" L x 2.5" D	
Environmental	Indoor Installations Only. 50 °C, Non-condensing Humidity	
Storage Temperature	-30 °C to 60 °C	
User Interface	Simplweb UI interface available on all computers and devices	
Human Interface	3 ½" Touchscreen is optional	
Stand-alone Ops	Capable of operating standard-alone. All parameters are stored locally after initialization including a real-time clock	
Communication Protocol	Private Wi-Fi Mesh Network based on Simpl Global's patent-pending technology Uses Simpl's proprietary communication protocol	
Settings and Capabilities	• Continuous Dimming 3,500 steps • Detailed scheduling. Up to 4 highly programmable schedules per system including sunset and sunrise with and without delays. • Persistent top-end setting to set down to 50% of max • Human Presence (mmWave for micro- and macro-sensing) • Daylight Harvesting with on-board light intensity sensor • Up to 4 highly programmable lighting scenes per system • Door inactivity sensor and actuation • Energy monitoring using additional SimplMeter channels. • Occupancy sensing, daylight harvesting, schedules, door inactivity and top-end trim operate normally in stand-alone mode.	

SimplRelay	SimplRelays Wireless Electrical Load Control		
Model Number	SimplRelays-2A-Q	SimplRelays-30A-S SimplWalkin SimplHeater	SimplRelays-30A-Q
Number of Relays	4	1	4
Current per Relay (A)	2A	20A NC 30A NO	20A NC 30A NO
Load Voltage	24 to 250VAC		
System Power	120VAC, less than 0.25A		
Auxiliary Sensors	None	• Door monitor (on board) • Temperature (SimplTRHL) • Relative Humidity (SimplTRHL) • Light intensity (SimplTRHL) • Up to three Thermistor inputs (Simpl Thermistors only)	
Dimensions	5.2" W x 3.4" H x 1.8" D	6.3" W x 4.8" L x 2.5" D	
Environmental	Indoor Installations Only. 50 °C, Non-condensing Humidity		
Storage Temperature	-30 °C to 60 °C		
User Interface	Simplweb UI interface available on all computers and devices		
Human Interface	3 ½" Touchscreen is optional		
Stand-alone Ops	Capable of operating standard-alone. All parameters are stored locally after initialization including a real-time clock		
Communication Protocol	Private Wi-Fi Mesh Network based on Simpl Global's patent-pending technology LoRa Radio for long-distance, inter-building communications. Uses Simpl's proprietary communication protocol		
Settings and Capabilities	• Detailed scheduling of individual loads • Sensors determine load shedding opportunities based on embedded sensors and schedules • Specify shedding priorities for each load.		

