HVAC AUTOMATION



Dat	e:					
				Location: Distributor:		
			Application Details	• •		Mode
Ч	Model 8800	Communicating Thermostat	Requires 1 per zone of HVAC or Humidity control. Controls Heat/Cool, or Heat Pump, Single or Multi-Stage Equipment. Humidifier and Dehumidifier.			8800
Y	Model 8826	System Controller	Requires 1 per 24 thermostats. Provides centralized control up to 24 thermostats. Provides energy management settings, and schedules for thermostats. For Applications over 24 thermostats additional units are required.			8826
V	Model 8819	Distribution Panel	Requires 1 per 8 thermostats. Distributes communications for up to 8 thermostats. For applications over 8 thermostats additional units are required.			8819
			Optional System	n Components		
	Part Number	•	_	Application Details	Quantity	Mode
Ч	Model 8051	Flush Mount Temperature Sensor		See guidelines on back		8051
	Model 8052	Outdoor Duct Mount Remote Temperature Sensor		See guidelines on back		8052
	Model 8053	Surface Mount Temperature Sensor		See guidelines on back		8053
	Model 8081	Surface Mount Remote Temperature Sensor/ Support Module		Module See guidelines on back		8081
	Model 8082	Surface Mount Remo	te Humidity Sensor/ Support Mod	dule See guidelines on back		8082
	Model 8811	232/485 Protocol Ada	pter (check out/troubleshooting)	1 per 32 thermostats		8811

GUIDELINES FOR OPTIONAL REMOTE SENSORS

Remote Temperature Sensors

The 8051/8052/8053 can be wired directly to the model 8800 thermostat on either S1/S2 or T1/T2 terminals. S1/S2 for outdoor temperature reporting. T1/T2 for a control temperature sensor.

Model 8051 Flush mount temperature sensor:

- For indoor use only
- Installed in Drywall applications where surface mount sensor is not appropriate
- Required 1/64" between wall and sensor to measure air temperature

Model 8052 Duct/outdoor temperature sensor:

- For indoor or outdoor use
- Used to monitor air temps for diagnostic purposes (plenum temp, Critical area temperatures, freezers, coolers, etc.)
- Can not be used to measure water temperature

Model 8053 Surface mount temperature sensor:

- For indoor use only
- Used where uniform installation is requested by customer. For averaging with 8061 and 2nd surface mount sensor

Model 8081 and 8082 modules:

- Used to report temperature and relative humidity values back to the thermostat
- As many as 4 8081/8082 modules can be used per thermostat (in any combination totaling no more than 4)
- Temperature/Humidity values can be configured to control or monitor
 - Control values will be used to activate and deactivate the equipment, multiple sensors set to control will provide an average value
 - Monitor values are just for informative purposes

Model 8081:

- Supports up to 2 temperature sensors
- There is 1 on board sensor (can be disabled if off board temperature sensor is used through dipswitch)
- Options include:
 - 1 on board sensor
 - 1 on board and 1 off board sensor
 - 1 off board sensor
 - 2 off board sensor
- For indoor use only

Model 8062:

- Supports 1 temperature and 1 Relative Humidity
- The Relative Humidity is built onto the board
- There is 1 on board temperature sensor (can be disabled if an off board temperature sensor is used)
- Options include:
 - 1 on board temperature sensor
 - 1 off board temperature sensor
 - You can average up to 4 humidity values with 4 8062 connected to the thermostat.
- For indoor use only

WIRING GUIDELINES

Wiring Length of runs guidelines:

- Maximum distance between the 8826 System Controller and 8800 Thermostat is 4000 ft., the 8819 Distribution Panel can be located anywhere within this run.
- Maximum distance between the 8800 Thermostat and a 8081/8082 Sensor is 1000 ft.
- Maximum distance between a 8800/8081/8082 and a 8051/8052/8053 Remote Sensor is 300 ft.

Wire Types:

- Use Category 5 (CAT5) or equivalent for,
 - 8826 to 8819
 - 8819 to 8800
 - 8800 to 8081/8082/8051/8052/8053
 - 8081/8082 to 8051/8052/8053
- Use standard 18 gauge thermostat wire for,
 - 8800 to HVAC System or Humidifier or Dehumidifier
 - 8051/8052/8053 to 8800/8081/8082