



Figure 1: Predator Controller Only

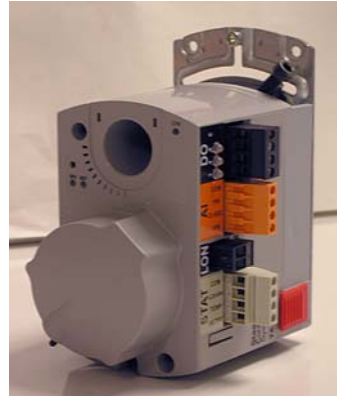


Figure 2: Predator VAV Actuator

Description

The LONMARK[®] certified configurable Predator[®] Controller provides direct digital control of a variety of mechanical equipment ranging from zone level control of VAV/CV, Heat Pump, Unit Ventilator, and Fan Coil Units to air distribution units to mechanical plants to spare point pick up of miscellaneous zone equipment. The Predator Controller is designed to reside on a LONWORKS[®] network, providing seamless interaction with all LONMARK products. The Predator Controller offers cost-effective flexibility that provides various input/output configurations; each designed to meet the individual equipment application requirements.

Features

- Conforms to and is certified to the LONMARK interoperability guidelines, enabling information sharing with other LONMARK products.
- LONMARK-compliant with space comfort functional profile number 8505 for zone level control and the Discharge Air Controller Functional Profile 8610 for air distribution control.
- Field-selectable parameters allow entry and updating of setpoint and control parameters via the TALON[®] Interface.
- Two packaged designs to meet unique market needs, consisting of:
 - Predator Controller Only two-piece series, consisting of a plenum-rated NEMA 1 Enclosure Cover with Embedded Controller Board and a separate Wiring Base, protects electronic parts from potential damage during installation.
 - Integral shaft-mount of the one-piece Predator VAV Actuator further reduces installation and setup time.
- Variety of platform configurations for application flexibility.
- Advanced PID control minimizes offset and maintains tighter setpoint control.
- Return to service from power failure without operator intervention.

Applications

The Predator Controllers can be configured to control a variety of equipment

Predator Type	Control Functionality
VAV/CV Single Duct	<ul style="list-style-type: none"> ▪ VAV/CV cooling only ▪ VAV/CV heating only ▪ VAV/CV with hot water reheat ▪ VAV/CV with electric reheat (up to three stages) ▪ VAV cooling/heating switchover ▪ VAV series or parallel fan-powered with hot water reheat ▪ VAV series or parallel fan-powered with electric reheat (up to three stages)
VAV/CV Dual Duct	<ul style="list-style-type: none"> ▪ Cold duct and hot duct ▪ Dual cold duct ▪ Dual hot duct
Low Flow Single Duct	<p>For Critical areas and maximum energy efficiency – ideal control for 50-800 fpm</p> <ul style="list-style-type: none"> ▪ VAV/CV cooling only ▪ VAV/CV heating only ▪ VAV/CV with hot water reheat ▪ VAV/CV with electric reheat (up to three stages) ▪ VAV cooling/heating switchover ▪ VAV series or parallel fan-powered with hot water reheat ▪ VAV series or parallel fan-powered with electric reheat (up to three stages)
Low Flow Dual Duct	<p>For Critical areas and maximum energy efficiency – ideal control for 50-800 fpm</p> <ul style="list-style-type: none"> ▪ Cold duct and hot duct ▪ Dual cold duct ▪ Dual hot duct
VAV with Variable Speed Fan Control	<p>For VAV/CV zones that have an electrically commutated (ECM) fan motor that require automatic adjustment of terminal parallel or series fan speed to match current loading conditions</p>
Heat Pump	<ul style="list-style-type: none"> ▪ Single-compressor heat pump without reversing valve ▪ Single-compressor heat pump, mixed air control without reversing valve ▪ Single-compressor heat pump with reversing valve ▪ Single-compressor heat pump with reversing valve and mixed air control ▪ Multi-stage compressor (1-3) heat pump, mixed air without reversing valve ▪ Multi-stage compressor (1-3) heat pump, mixed air control with reversing valve
Unit Vent (ASHRAE Cycle II)	<ul style="list-style-type: none"> ▪ Cooling and outside air damper ▪ Heating and outside air damper ▪ Shared cooling/heating coil and outside air damper (2-pipe) ▪ Cooling/heating coil and outside air damper (4-pipe) ▪ Cooling/heating coil and outside air damper with face/bypass damper (4-pipe) ▪ Shared cooling/heating coil, plus electric heat and outside air damper (2-pipe) ▪ Shared cooling/heating coil, electric heat and OA damper w/ face/bypass (2-pipe) ▪ One- or two-stage DX cooling with heating coil and outside air damper
Unit Vent with Dehumidification	<p>For Heating/Water Source Cooling (H/C) Unit Ventilators that require humidification control, while meeting Demand Control Ventilation (DCV) standards</p>
Fan Coil Unit	<ul style="list-style-type: none"> ▪ Fan coil cooling only ▪ Fan coil heating only ▪ Two-pipe fan coil unit shared cooling and heating ▪ Four-pipe fan coil unit cooling and heating ▪ Fan coil unit with 1 to 2 stages of DX cooling and electric heat ▪ Fan coil unit with 1 to 2 stages of DX cooling and hot water coil

Predator Type	Control Functionality
Miscellaneous Equipment	The Four Loop Controller contains 4 internally cascaded PID loops and programming logic to perform control of a variety of equipment, such as: <ul style="list-style-type: none"> ▪ Hot water converters ▪ Simple heating and cooling plants ▪ 2 VAV rooms ▪ IAQ routines ▪ Humidity control ▪ 3 Sensor inputs loops ▪ VFD control ▪ Fan tracking ▪ Heat recovery units ▪ Emergency generators ▪ Up to 4 stat to valves ▪ Up to 4 booster coils ▪ Miscellaneous input / output points
Four stage DX AHU	For Single Zone Air Handling Unit with hot water heating, up to 4 stages of DX cooling and Exhaust Fan coordination with OA damper control
VAV Air Handling Unit	For VAV Air Handling units with <ul style="list-style-type: none"> ▪ OA, RA and DA dampers ▪ Economizer cycle ▪ Demand Control Ventilation routines (DCV) ▪ Supply air temperature reset ▪ Fan speed ▪ Fan status ▪ Safeties
Three Zone Control	For controlling Room Temperature Sensor to Valve, Multi-Zone AHU's, Multiple VAV Pressure Dependant zones and etc. with the following configurations: <ul style="list-style-type: none"> ▪ 2 to 3 zones with heating OR cooling ▪ 2 zones of heating AND cooling ▪ 2 to 3 zones of heating OR cooling valve with fan

Based upon availability of input and output capacity, perimeter heat, lighting, occupancy and outdoor air temperature sensors can be added to these Predator types.

Hardware

There are two types of Predator hardware:

- Predator Controller Only for application control of all types listed above
- Predator VAV Actuator for smaller point count VAV/CV units

Predator Controller Only Hardware

The unique design of the Predator Controller consists of two components:

- Enclosure Cover with Embedded Controller Board
- Wiring Base

Predator Controller Only Enclosure Cover with Embedded Controller Board

This design reduces threat of damage to the controller board during installation and reduces service time. The wiring connections are made to the wiring base, allowing this component to be installed early in the project cycle. Additionally, if the board needs repair, the controller board can be removed easily, without disrupting the wiring connections.

To further enhance the protection of the controller board, it is embedded into the plenum-rated enclosure cover. Installation consists of snapping the enclosure cover onto the wiring base.

The Predator Controller Only Enclosure Cover with Embedded Controller Board is available in the following configuration:

- 6 Inputs, 8 Digital Outputs, 3 Analog Outputs, 1 Room Sensor, (1 DPS for VAV/CV only)

The Controller Board communicates to all LONMARK devices via a Neuron[®]-chip. The controllers are shipped with pre-loaded applications, reducing engineering start-up time.

The control application is stored in Flash memory. Flash memory allows an application to be changed without removing the existing controller or memory chip.

Predator Controller Only Wiring Bases

The Wiring Base is available in the following Predator Controller Only configuration:

1. Full Point

The Full Point base is designed to handle either Full Point 5IN/8DO/3AO controller or Reduced Point 4IN/6DO controller. This base provides the flexibility of interchanging a Reduced Point I/O-style controller with a Full Point I/O-style controller if needs change.

Predator VAV Actuator Hardware

The Predator VAV Actuator one-piece design combines the proven reliability of the Predator VAV controller functionality with Siemens OpenAir GDE (44 lb-in) direct-coupled, 24 Vac, Non-spring return, rotary electric actuator.

Also, the Predator VAV Actuator one-piece design combines the proven reliability of the Predator VAV controller functionality with Siemens OpenAir GLB (88 lb-in) direct-coupled, 24 Vac, Non-spring return, rotary electric actuator.

By incorporating control of VAV applications directly into these compact actuator housings, installation costs can be reduced. Additionally, these Predator solutions continues to meet plenum rated job requirements.

Embedded Controller Board

The Embedded Controller has on-board termination support for 2 Input, 3 Digital Outputs, 1 Room Sensor, and 1 DPS. The Controller Board communicates to all LONMARK devices via a Neuron[®]-chip. The controllers are shipped with pre-loaded applications, reducing engineering start-up time.

Siemens Actuator

The direct-coupled 24 Vac Non-spring Return Rotary Electric LON VAV/CV Actuator is designed for three-position (floating) control of building HVAC dampers. It features easy-to-see position indicator, and quiet, low-power operation.

Spare Input/Output Points

The Predator Controller, depending upon the application, may have up to 3 input and 2 output spare points available. These points can be used for control of devices located in close proximity to the Predator Controller, reducing installation costs.

Differential Pressure Sensor *for all Zone Level VAV/CV Applications*

The Differential Pressure Sensor connects to the air terminal box air-velocity sensing elements to provide measurement of the differential pressure. The measured value is converted to actual airflow in CFM (l/s) by the Predator VAV/CV controller.

Controller Specifications

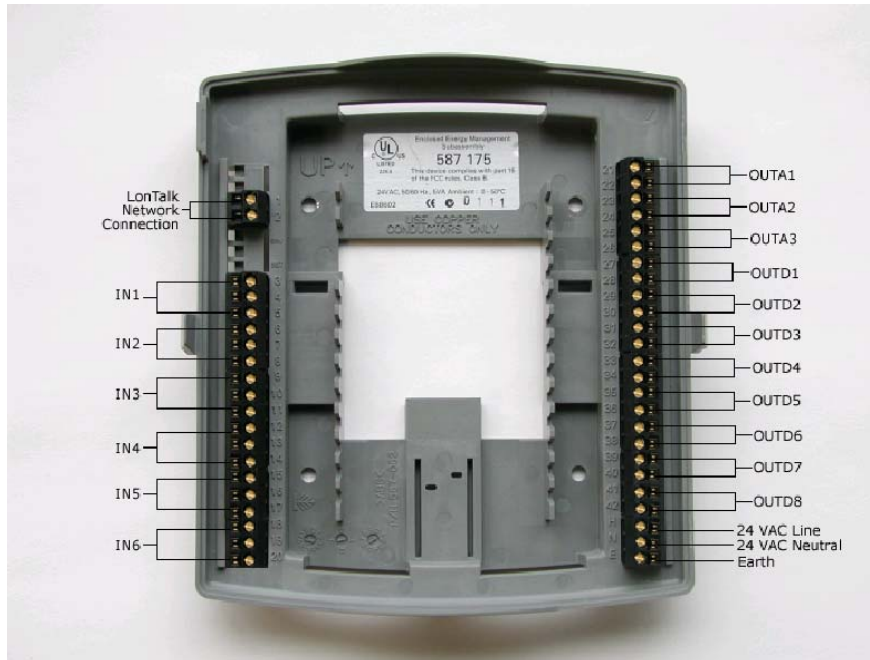
Processor Type	Neuron 3150
Processor Clock Speed	10 MHz - Neuron
Network Communication Speed	TP/XF-10 (78.8K bps)
Memory Size	49 K Flash Memory 10 K SRAM

Voltage Requirements	24 Vac @ 50/60 Hz
Power Consumption	5 VA plus loads
Ambient Operating Environment	+32°F to +122°F (0°C to +50°C) 5 to 95% RH (Non-condensing)
Agency Listings	UL/CUL 916 PAZX/PAZX7 (Enclosed Energy Management) LONMARK 3.2
Regulatory Compliance	FCC Part 15, Class B CISPR 22 Class B CE Mark Australian EMC Framework
Predator Dimensions	6.75" H × 7" W × 2.45" D (171 mm × 178 mm × 62 mm)
Predator Weight	2 lbs. (.9 kg)
Predator VAV Actuator Dimensions:	5 9/16" H × 2 15/16" W × 4 3/16" D (142 mm × 75 mm × 106 mm)
Predator VAV Actuator Weight	2.0 lbs. (.9 kg)

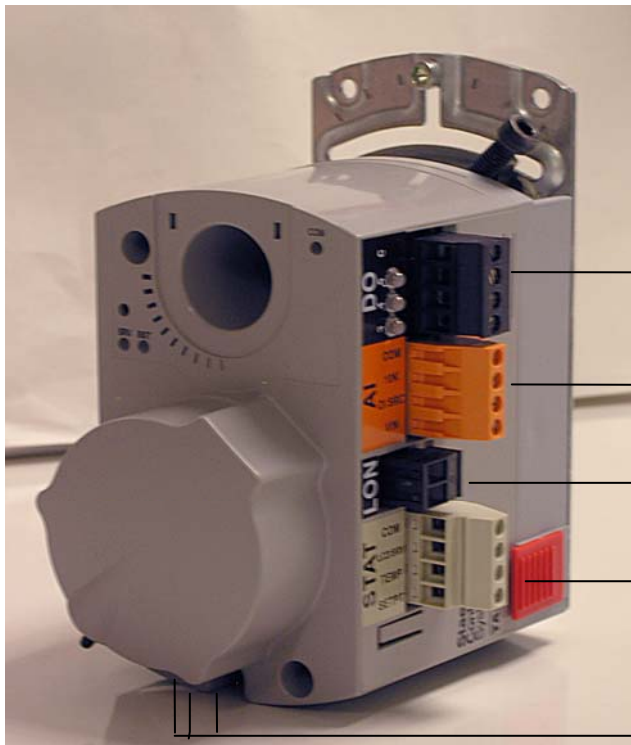
Actuator Specifications *For Predator VAV Actuator*

Function	
Torque	GDE 44 lb-in; GLB 88 lb-in
Runtime for 90° opening or closing	90 sec. At 60 Hz (108 sec. At 50 Hz) for the GDE 125 sec. At 60 Hz (151 sec. At 50 Hz) for the GLB
Nominal angle of rotation	90°
Maximum angular rotation	95°
Mounting	
Shaft size	3/8 to 5/8 inch (8 to 16mm) diameter
Minimum shaft length	1-1/2 inch (38 mm)
Housing	
Material	Durable plastic
Gear lubrication	Silicone free
Miscellaneous	
Life cycle	Designed for over 50,000 full stroke cycles and 1.5 million repositions at rated torque and temperature

Wiring Diagrams



Full Point Wiring Base



- 3 DO
- 2 AI
 - 10K Thermistor
 - Voltage input
 - Either of which can be a DI
- LON port
- Room Sensor Connection
- Power Wiring: (E) Earth (H) Line (C) Neutral

Predator VAV Actuator Wiring

Wiring Recommendations:

Input/AO	20 to 22 AWG
DO	18 to 22 AWG
Power	16 to 18 AWG
LONWORKS Network	22 AWG Level 4

Transformer Requirements and Recommended Voltages

Type	Class 2, 24 Vac, 50/60 Hz
------	---------------------------

Optional Accessories

Predator Room Temperature Sensors

The Predator Room Temperature Sensors offer a wide range of features and functions. The sensors work with the Staefa TALON building-automation system to deliver exceptional occupant comfort in even the most demanding application environments. The product family ranges from temperature-sensing-only variants to sensors that include LCD display, setpoint and override. All sensors incorporate precision temperature-sensing elements too accurately and reliably measure room temperature. Their compact design results in an attractive, inconspicuous installation. A styled ventilation ring optimizes airflow through the cover for fast measurement response.

Predator Room Sensor Specifications

Dimensions	3-11/32" H x 2-1/2" W x 1-1/2" D (85 mm x 63 mm x 38 mm)
Temperature Monitoring Range	55° to 95°F (13° to 35°C)
Thermistor Resistance Value	10,000 Ohms @ 77°F (25°C)
Setpoint Range	55-95°F
Calibration Adjustments	None Required
Standard Colors	White

Differential Pressure Sensors

The self contained-remote mount Siemens Differential Pressure Sensors (DPS) may be used as the primary input for control and as a cost effective solution to control VAV Dual Duct zones.

The 590 Series differential pressure sensors are 24 Vac powered and provides a 0-10 Volt control signal with a 1% full-scale accuracy. The standard control signal enables these devices to be used with almost any control or energy management system. Five (5) different units' measure ranges, from 0-1" water column to 0-5" water column. A -.25" to +.25" version is offered as well.

The case is made from fire retardant, glass-filled polyester. The pressure ports are standard ¼" barb fittings. Power and signal wires are terminated on a screw terminal strip. In addition, all units have zero and span potentiometers, allowing them to be field calibrated. The housing base is mounted on a metal back plate for easy installation. Versions with conduit housings are also available.

Predator Ordering Information

Predator Controller Only

Description	Product Number
Predator 10K Full Point Single Duct VAV/CV Controller 5IN 8DO 2AO 1DPS 5 IN (2) 10 K Ω Thermistor / (3) 0-10 Vdc or Dry Contact 8 DO 24 Vac, 12VA, Triac 2 AO 0-10 Vdc @ 2 mA 1 DPS 0 to 2 inch Differential Pressure Sensor 1 RS 10K Ω Thermistor Room Sensor	587-135

Predator 10K Full Point Dual Duct VAV/CV Controller 5IN 8DO 2AO 1DPS	587-136
5 IN (2) 10 K Ω Thermistor / (3) 0-10 Vdc or Dry Contact	
8 DO 24 Vac, 12VA, Triac	
2 AO 0-10 Vdc @ 2 mA	
1 DPS 0 to 2 inch Differential Pressure Sensor	
1 RS 10K Ω Thermistor Room Sensor	
Predator 10K Reduced Point HP Controller 4IN 6DO	587-245
4 IN (2) 10 K Ω Thermistor / (2) 0-10 Vdc or Dry Contact	
6 DO 24 Vac, 12VA, Triac	
1 RS 10K Ω Thermistor Room Sensor	
Predator 10K Full Point HP Controller 6N 8DO 3O	587-255
6 IN (2) 10 K Ω Thermistor / (3) 0-10 Vdc or Dry Contact	
8 DO 24 Vac, 12VA, Triac	
3 AO 0-10 Vdc @ 2 mA	
1 RS 10K Ω Thermistor Room Sensor	
Predator 10K Reduced Point UV CH/HW Controller 4IN 6DO	587-275
4 IN (2) 10 K Ω Thermistor / (2) 0-10 Vdc or Dry Contact	
6 DO 24 Vac, 12VA, Triac	
1 RS 10K Ω Thermistor Room Sensor	
Predator 10K Reduced Point UV DX Controller 4IN 6DO	587-276
4 IN (2) 10 K Ω Thermistor / (2) 0-10 Vdc or Dry Contact	
6 DO 24 Vac, 12VA, Triac	
1 RS 10K Ω Thermistor Room Sensor	
Predator 10K Full Point UV CH/HW Controller 6N 8DO 3AO	587-285
6 IN (2) 10 K Ω Thermistor / (3) 0-10 Vdc or Dry Contact	
8 DO 24 Vac, 12VA, Triac	
3 AO 0-10 Vdc @ 2 mA	
1 RS 10K Ω Thermistor Room Sensor	

Predator Controller Only continued

Description	Product Number
Predator 10K Full Point UV DX Controller 6I 8DO 3AO	587-286
6 IN (2) 10 K Ω Thermistor / (3) 0-10 Vdc or Dry Contact	
8 DO 24 Vac, 12VA, Triac	
3 AO 0-10 Vdc @ 2 mA	
1 RS 10K Ω Thermistor Room Sensor	
Predator 10K Full Point UV CH/HW with Face/Bypass Controller 6N 8DO 3AO	587-287
6 IN (2) 10 K Ω Thermistor / (3) 0-10 Vdc or Dry Contact	
8 DO 24 Vac, 12VA, Triac	
3 AO 0-10 Vdc @ 2 mA	
1 RS 10K Ω Thermistor Room Sensor	
Predator 10K Reduced Point CH/HW FCU Controller 4IN 6DO	587-215
4 IN (2) 10 K Ω Thermistor / (2) 0-10 Vdc or Dry Contact	
6 DO 24 Vac, 12VA, Triac	
1 RS 10K Ω Thermistor Room Sensor	
Predator 10K Reduced Point DX FCU Controller 4IN 6DO	587-216
4 IN (2) 10 K Ω Thermistor / (2) 0-10 Vdc or Dry Contact	
6 DO 24 Vac, 12VA, Triac	
1 RS 10K Ω Thermistor Room Sensor	
Predator 10K Full Point CH/HW FCU Controller 6IN 8DO 3AO	587-225
6 IN (2) 10 K Ω Thermistor / (3) 0-10 Vdc or Dry Contact	
8 DO 24 Vac, 12VA, Triac	
3 AO 0-10 Vdc @ 2 mA	
1 RS 10K Ω Thermistor Room Sensor	

Predator 10K Full Point DX FCU Controller 6IN 8DO 3AO	587-226
6 IN (2) 10 K Ω Thermistor / (3) 0-10 Vdc or Dry Contact	
8 DO 24 Vac, 12VA, Triac	
3 AO 0-10 Vdc @ 2 mA	
1 RS 10K Ω Thermistor Room Sensor	
Predator 10K Three Zone Controller 6IN 8DO 3AO	587-289
6 IN (2) 10 K Ω Thermistor / (4) 0-10 Vdc or Dry Contact	
8 DO 24 Vac, 12VA, Triac	
3 AO 0-10 Vdc @ 2 mA	
1 RS 10K Ω Thermistor Room Sensor	
Predator 10K Four Loop Controller 6IN 8DO 3AO	587-292
6 IN (2) 10 K Ω Thermistor / (4) 0-10 Vdc or Dry Contact	
8 DO 24 Vac, 12VA, Triac	
3 AO 0-10 Vdc @ 2 mA	
1 RS 10K Ω Thermistor Room Sensor	
Predator 10K VAV AHU Controller 6IN 8DO 3AO	587-293
6 IN (2) 10 K Ω Thermistor / (4) 0-10 Vdc or Dry Contact	
8 DO 24 Vac, 12VA, Triac	
3 AO 0-10 Vdc @ 2 mA	
1 RS 10K Ω Thermistor Room Sensor	
Predator VAV/CV Single Duct Low Flow Controller 5IN 8DO 2AO 1DPS	588-508
5 IN (2) 10 K Ω Thermistor / (3) 0-10 Vdc or Dry Contact	
8 DO 24 Vac, 12VA, Triac	
3 AO 0-10 Vdc @ 2 mA	
1 DPS 0 to 0.25 inch Differential Pressure Sensor	
1 RS 10K Ω Thermistor Room Sensor	
Predator VAV/CV Dual Duct Low Flow Controller 5IN 8DO 2AO 1DPS	588-509
5 IN (2) 10 K Ω Thermistor / (3) 0-10 Vdc or Dry Contact	
8 DO 24 Vac, 12VA, Triac	
3 AO 0-10 Vdc @ 2 mA	
1 DPS 0 to 0.25 inch Differential Pressure Sensor	
1 RS 10K Ω Thermistor Room Sensor	
Predator 10K UV with Dehumidification Controller 6IN 8DO 3AO	588-510
6 IN (2) 10 K Ω Thermistor / (4) 0-10 Vdc or Dry Contact	
8 DO 24 Vac, 12VA, Triac	
3 AO 0-10 Vdc @ 2 mA	
1 RS 10K Ω Thermistor Room Sensor	
Predator 10K VAV Variable Speed Fan 6IN 8DO 2AO	588-511
6 IN (2) 10 K Ω Thermistor / (4) 0-10 Vdc or Dry Contact	
8 DO 24 Vac, 12VA, Triac	
2 AO 0-10 Vdc @ 2 mA	
1 RS 10K Ω Thermistor Room Sensor	
Predator 10K Four Stage SZ AHU Controller 6IN 8DO 3AO	588-513
6 IN (2) 10 K Ω Thermistor / (4) 0-10 Vdc or Dry Contact	
8 DO 24 Vac, 12VA, Triac	
3 AO 0-10 Vdc @ 2 mA	
1 RS 10K Ω Thermistor Room Sensor	

Wiring Bases

Description	Product Number
Predator Full Point Wiring Base Termination support up to 5IN, 8DO and 3AO	587-175

Predator VAV Actuator

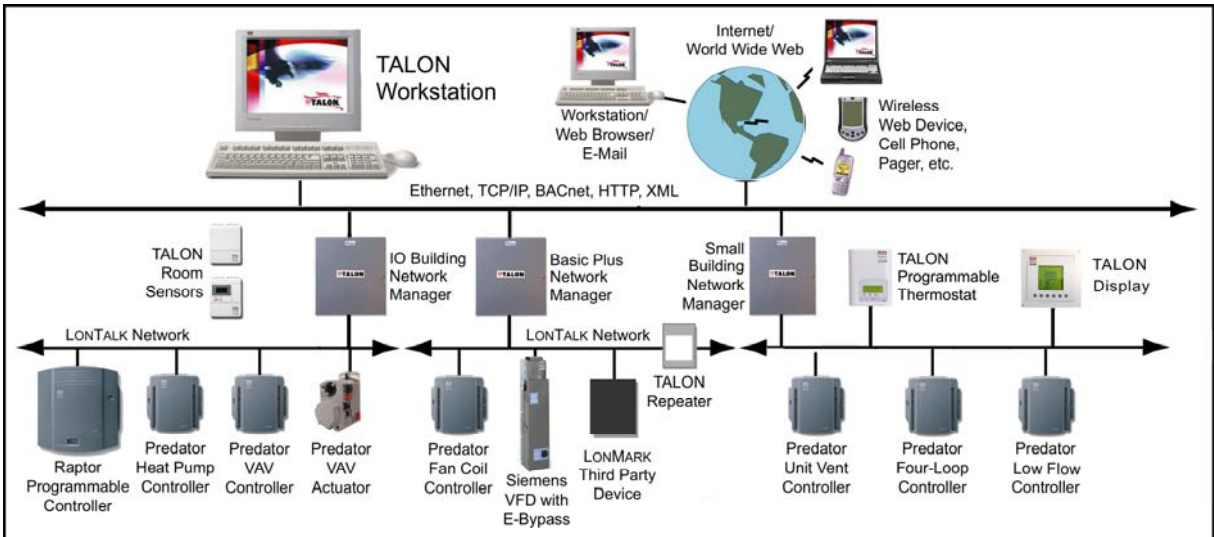
Predator 10K GLB VAV Actuator 2301	587-103
2 IN (1) 10 K Ω Thermistor / (1) 0-10 Vdc (Either can be Dry Contact but not both at the same time)	
3 DO 24 Vac, 12VA, Triac (non-powered enables hot/neutral field wiring)	
1 DPS 0 to 2 inch Differential Pressure Sensor	
1 RS 10K Ω Thermistor Room Sensor	
1 Siemens GLB (88 lb-in) Actuator	
Predator 10K GDE VAV Actuator 2301	587-104
2 IN (1) 10 K Ω Thermistor / (1) 0-10 Vdc (Either can be Dry Contact but not both at the same time)	
3 DO 24 Vac, 12VA, Triac (non-powered enables hot/neutral field wiring)	
1 DPS 0 to 2 inch Differential Pressure Sensor	
1 RS 10K Ω Thermistor Room Sensor	
1 Siemens GDE (44 lb-in) Actuator	
Predator 10K GDE VAV Actuator 2301 with CO2	588-524
2 IN (1) 10 K Ω Thermistor / (1) 0-10 Vdc (Either can be Dry Contact but not both at the same time)	
3 DO 24 Vac, 12VA, Triac (non-powered enables hot/neutral field wiring)	
1 DPS 0 to 2 inch Differential Pressure Sensor	
1 RS 10K Ω Thermistor Room Sensor	
1 Siemens GDE (44 lb-in) Actuator	
Predator 10K GDE VAV Actuator 2301 with SAT	588-525
2 IN (1) 10 K Ω Thermistor / (1) 0-10 Vdc (Either can be Dry Contact but not both at the same time)	
3 DO 24 Vac, 12VA, Triac (non-powered enables hot/neutral field wiring)	
1 DPS 0 to 2 inch Differential Pressure Sensor	
1 RS 10K Ω Thermistor Room Sensor	
1 Siemens GDE (44 lb-in) Actuator	

Accessories

Description	Product Number
Predator Room Sensors	
Sensing Only	587-180
Bypass	587-181
Setpoint	587-182
Temperature Display	587-183 ¹
Setpoint and Bypass	587-184
Bypass and Temperature Display	587-185 ¹
Setpoint and Temperature Display	587-186 ¹
Setpoint, Bypass and Temperature Display	587-187 ¹
1 Sensor will display Fahrenheit or Celsius temperature.	
DIN Rail mounting Clips of 50	587-150
4.7K Ohm Resistor, 100 Pack	587-151

4-20 mA 500 Ohm Resistor, 100 Pack	587-152
Black Termination Kit (10 — 2 position, 10 – 3 position, 20 – 6 position)	587-171
Green Rising-Cage Termination Kit (10 — 2 position, 10 – 3 position, 20 – 6 position)	587-171RC
Predator VAV Actuator Model 1201 Connector and Mount Kit	587-172
Predator VAV Actuator Model 2301 Connector and Mount Kit	587-174
Predator LON Connector Kit, 10 Pack	587-173
Talon Network Interface Adapter (use as connector between Lon network cable from the service tool to the room sensor)	587-856
No Logo Predator Room Sensors	
Sensing Only	587-550B
Setpoint	587-552B
Setpoint and Bypass	587-554B
Setpoint, Bypass and Temperature Display	587-557B
10 K Thermistor Sensors	
Duct Temperature Sensor, point, 10 K NTC, 4" probe	587-691
Duct Temperature Sensor, averaging, 10 K NTC, 24" flex	587-694
Pipe Temperature Sensor, immersion well, 10 K NTC, with 2.5 s.s. well	587-693
Pipe Temperature Sensor, strap-on, 10 K NTC	587-695
Outdoor Air Temperature Sensor, point 10 K NTC, with shield	587-692
Flush Mount Room Sensor	
Metal Flush Mount Room Temp Sensor, 10 K Thermistor	540-984
Warmer/Cooler Room Sensor	
Room Temp Sensor, w / term. Blocks, warmer/cooler set point adjustment	587-188
Room Temp Sensor, w / term. Blocks, warmer/cooler set point adjustment, occupancy override	587-189
Room Temp Sensor, w / term. Blocks, warmer/cooler set point adjustment, occupancy override, LCD Display	587-196
Remote Mount Differential Pressure Sensors	
DP Sensor 0-5" w.c.	590-501
DP Sensor 0-2" w.c.	590-502
DP Sensor 0-1" w.c.	590-503
DP Sensor 0-0.5" w.c.	590-504
DP Sensor –0.25 to .25" w.c.	590-505
DP Sensor 0-5" w.c. in conduit box	590-506
DP Sensor 0-2" w.c. in conduit box	590-507
DP Sensor 0-1" w.c. in conduit box	590-508
DP Sensor 0-0.5" w.c. in conduit box	590-509
DP Sensor –0.25 to .25" w.c. in conduit box	590-510

TALON Architecture



Notice: Information in this document is based on specifications believed correct at the time of publication. The right is reserved to make changes as design improvements are introduced.

Credits: *Staeffa Control System*, *Raptor*, *Predator*, and *TALON* are trademarks of Siemens Building Technologies, Inc. *Niagara Framework* is a registered trademark of Tridium, Inc. Other products and company names herein may be the trademarks of their respective owners.



Siemens Building Technologies, Inc.
 HVAC Products
 1000 Deerfield Parkway
 Buffalo Grove, Illinois 60089
 Phone 847-215-1000
www.staeffa.com



Copyright 2006 by Siemens Building Technologies, Inc.