

# **RT-3000**

#### FEATURES

- 180° visibility for all visual indicators with cover in place
- Operating voltages: 230VAC, 115VAC, 24VAC, 24VDC
  Patented cover tether retains the one-piece cover at unit
- Patented cover terner retains the one-piece cover at unit
  Flashing LED on detector head indicates normal operation, can
- be viewed with cover on
- Ionization and Photoelectric versions available
- Interconnect up to 30 units for common functions
- Works with the complete range of APC remote accessories
  to include all legacy duct detectors and sample tubes from APC Compatible with building automation and fire alarm systems
- SSU-FASTTUBE Equipped (see page 2)

#### Installation - Mechanical

- Patented cover latch offers the industry's only no-tools single point cover assembly
- Patented cover tether keeps cover at unit for convenience
  Detented no tools front or room long and remaining compliance
- Patented no-tools front or rear loading and removing sampling/ exhaust tubes
- All gaskets are permanently attached and pre-installed

#### Installation - Electrical

- Patented no-tools terminal blocks for easier wiring with built-in test meter probe access
- Intuitively labeled terminal positions
- Dedicated and segregated terminal blocks for power input, FACU interface, relay control, remote accessories and detector interconnection
- No confusing "special programming" required
- Permanently attached wiring diagram on inside front cover
- Two sets of 10A form "C" alarm contacts
- One set of 10A form "C" trouble contacts
- One set of 1A form "A" alarm contacts and one set of 7A form
  "B" trouble contacts for FACU interface Testing
- Patented Maintenance Mode offers 3-minute interval for test
  and maintenance functions with no extra trouble reports to the
  system (auto shut-off upon cover latch engagement)
- Patented Test Port allows for aerosol smoke testing without cover removal
- Magnet test capability (magnet included)

#### Service

- Standard interchangeable "twist-in" UL268 photoelectric or ionization heads for easy cleaning and replacement
- Advanced detector head design yields internal dust filtering
- Front no-tools sampling tube removal and replacement
- provides for simple inspection of debris accumulation
  Compatible with all legacy APC remotes, duct detectors and
- sample tubes

#### Performance

- NEMA 4X watertight enclosure for non-hazardous indoor and outdoor applications, to include corrosive environments
- Listed for air velocities between 100-4000 ft./min
- Ion and Photo models listed for applications ranging from -4°F to 158°F (-20°C to 70°C)





3240-1004:0121

Nema 4X Duct Smoke Detectors Weathertight, Hi-Temp, Low Flow & No Tools

The RT-3000 builds on our commitment to installer/ servicer friendly products, and significantly reduces the total cost of ownership versus other comparable products. Attention to detail has yielded a host of "No-Tools Required" features, as well as a multi-application performance level as yet unmatched in the industry.

The weathertight NEMA 4X rated corrosion resistant enclosure coupled with extended temperature listings allow installation in the widest possible range of indoor/ outdoor environments. The RT-3000 can be installed in both horizontal or vertical configurations to match installation preferences.

A simple flip of the cover latch releases or secures the NEMA 4X enclosure which houses:

- a next-generation control board with color-coded, trade-dedicated output terminals
- twist-in photo or ion sensor heads, providing a choice in matching technology to application
- a push-button timed Maintenance Mode that allows test and maintenance functions with no extra trouble reports to the system
- a uniquely constructed chassis that prevents accumulation of condensate commonly generated by the severe temperature changes these devices are typically exposed to

ISO 9001 REGISTERED COMPANY

SAEVU

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No Excuses, Just Solutions!



## Specifications:

Air duct smoke detectors shall be SSU-RT-3000 Series. For ionization detectors the model number is SSU-RT-3000-N. For photoelectric detectors the model number is SSU-RT-3000-P. The detectors shall be listed by Underwriters Laboratories per UL 268A. The detectors shall operate at air velocities from 100 feet per minute to 4,000 feet per minute and at high temperatures of no less than 158°F (70°C). Shall provide visual pilot, trouble and alarm indications; shall provide instantaneous cover removal notification with maintenance by-pass. The detector enclosure shall be NEMA 4X rated and shall prevent accumulation of condensate within the detection chamber. Visual indication of alarm, trouble and power must be provided on the detector front, as well as a manual test and reset switch. Detector head shall not require additional filters or screens which must be maintained, and shall include both a standby and alarm visual indication. The housing shall contain a detector base which will accept photoelectric or ionization detector heads. Terminal connections shall require no tools for wire installation and shall be compatible with wire gauges between #14 and #22 AWG. Terminals shall be provided for remote pilot, remote alarm indications, strobe/horn, and remote test/reset switch. All wiring must comply with local codes and regulations. A method of testing the alarm function at the detector with a magnet and a method of smoke testing the detector without removing the cover must be provided. All unit, remote accessory, and common function connection designations must be permanently affixed to the unit. Cover and sampling/exhaust tube installation or removal must not require the use of tools. Capability for interconnection of up to 30 units shall be provided for common functions. Sampling and exhaust tubes shall be capable of removal/installation from the front and/or rear of the detector for inspection/maintenance.

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POWER REQUIREMENTS: (without accessories) 230VAC 17mA

115VAC 31

230VAC 29

115VAC 50

24VAC 251

24VAC 122.6 mA 24VDC 45

Alarm:

Standby:

**RELAY CONTACT RATING:** Alarm Contacts:

Trouble Contacts:

AIR VELOCITY: AMBIENT TEMPERATURE:

HUMIDITY: WIRING: APPROVALS:

MATERIAL: DIMENSIONS: MAX. NET WT.: RADIOACTIVE ELEMENT: HARDWARE:

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24VDC 100 mΑ Resistive load: 2 sets form "C" rated at 10 Amps @ 125VAC Resistive load: 1 set form "A" rated at 1 Amp (FACP) @ 30VDC Resistive load: 1 set form "C" rated at 10 Amps @ 125VAC Resistive load: 1 set form "B" rated at 7 Amps (FACP) @ 30VDC 100 to 4,000 ft./min. SSU-RT-3000-N -4°F to 158°F (-20°C to 70°C) SSU-RT-3000-P -4°F to 140°F (-20°C to 60°C) 10% to 93% RH (@32°C) Non-Condensing / Non-Freezing Solid or stranded: #14 to #24 AWG terminals UL Listed (UL268A, UROX) File # S2829 CSFM Listed (3240-1004:0121) MEA Accepted (73-92-E; VOL. 27) (pending) Grey plastic backbox, white plastic cover (Makrolon 94V-0) 13 ½" L x 5 ½" W x 2 ¼" H 3 ½ lbs. For RT-3000-N (Ionization) Americium 241; 0.9 Micro-Curie 7" exhaust tube, FAST Tube sectional sampling tube starter, sampling ube end cap, mounting template, test magnet, and mounting hardware included.

## **Ordering Information:**

Part # Description SSU-RT-3000-N Ionization: 230VAC, 115VAC, 24VAC, 24VDC 55000-225 SSU-RT-3000-P Photoelectric: 230VAC, 115VAC, 24VAC, 24VDC 55000-328 SSU-55000-225 Replacement Ionization Detector SSU-55000-328 Replacement Photoelectric Detector SAMPLING TUBES:

SSU-FASTTUBE Sectional sampling tube, kit fits up to 8' duct width SSU-STN-1 Metal sampling tube for 6" to 12" duct width SSU-STN-2 Metal sampling tube for 12" to 3.0' duct width SSU-STN-5 Metal sampling tube for 3.0' to 5.0' duct width Metal sampling tube for 5.0' to 10.0' duct width SSU-STN-10

Rev.C

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