# **Active-S** Humidity Control Sheets

## The one-and-done solution for preventing condensation in enclosures

Protect sensitive equipment in enclosures, cabinets and cases from condensation and excess moisture

#### **Prevents:**

- component corrosion
- electrical resistance
- decreased component performance
- risk of short circuits
- degraded electrical wire insulation
- dangerous arcing and sparking







Desiccants degrade quickly as they absorb moisture, requiring frequent replacement, while heaters and dehumidifiers require a power source and upkeep. Now, there's a much better way...

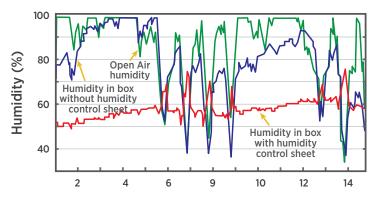
## **Only Active-S can absorb and release...**

Designed to protect sensitive components and systems, it is difficult to prevent moisture from collecting and forming condensation even within sealed enclosures. Opening and closing doors for maintenance, factory washdown applications, and fluctuating temperatures can leave your sensitive components and equipment at risk.

The Active-S "Humidity Control Sheet" is a highly effective equipment maintenance product that prevents condensation, utilizing a special active fabric developed for a major Japanese telecommunications provider.

Active-S is not a desiccant. Active-S Humidity Control Sheets are made of a macromolecule polymer, which is a super-absorbent material that "breathes," providing an active exchange of absorption and release. When humidity in the enclosure is high, the humidity control sheet absorbs the excess moisture, reducing humidity levels inside the cabinet. But when the cabinet becomes dry, the sheet "breathes out" the moisture, constantly suppressing and maintaining humidity at a certain level mitigating the possibility of condensation forming in the cabinet or enclosure.

## Humidity Control Sheet Humidity (Hygrometric) Measurement Test



#### **Measurement Conditions**

- Volume capacity of box used for testing: 13.9 liter (ø5mm vent hole in bottom)
- Humidity Control Sheet (post-card size) installed on lid
- Measurement location: outdoors location in Hachioji City, Tokyo
- Measurement time period: 2 weeks

Telecom construction and management contractors endorse these flexible, easy-to-install sheets due to their ability to control humidity with long-lasting performance. 1.6 million sheets installed in communications equipment, terminal boxes and protection devices; Active-S sheets work.



Optical Devices & Lenses



Drones



Oil & Gas



EV Charging Stations



Traffic Control & Surveillance



Outdoor WiFi Equipment



Internet Control Box



Food & Beverage Equipment

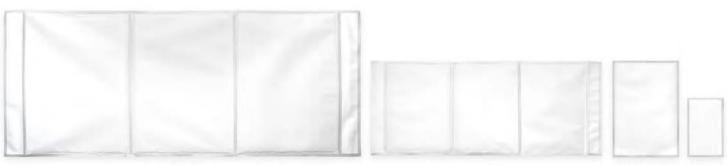
# **Why Active-S Humidity Control Sheets?**

- Consistently maintains humidity level by absorbing and releasing moisture in the air
- Fits any size enclosure, even tight spaces and curved surfaces
- Requires no space, no maintenance, no power source
- Long usage life
- Significantly reduces time and labor costs
- 10 years of proven field testing
- Installs with double-sided tape, Velcro or magnetic tape
- No moving parts to fail
- Four sizes to suit enclosure capacity
- Lowest purchased cost
- Lowest installation cost
- Lowest cost solution for controlling humidity



### Designed to control humidity in enclosures for these applications:

- Communication Equipment Construction Equipment Control Panels Drones EV Charging Stations Food and Beverage
- Gun Safes = Manufacturing Equipment = Monitoring Sensors = Oil & Gas = Optical Devices = M2M Devices = Marine Enclosures = Radar
- Railroad Infrastructure = Security & Monitoring Cameras = Ships & Vessels = Telecom Base Stations = Traffic Controls = Utilities and more...



AS-L5

AS-M10

AS-P30 AS-N30

| Active-S Part # | Size (mm)<br>Size (inches)                    | Weight (grams)<br>Weight (ounces) | Application Capacity (liters)<br>Application Capacity (cubic inches) |
|-----------------|---|-----------------------------------|--|
| AS-L5           | 560 X 230 X 3 mm<br>22.05 X 9.0 X 0.12 inches | 130 grams<br>4.6 ounces           | 400 liters<br>24,410 cubic inches<br>(14.1 cubic feet)               |
| AS-M10          | 370 X 150 X 3 mm<br>14.6 X 5.9 X 0.12 inches  | 50 grams<br>1.8 ounces            | 150 liters<br>9,154 cubic inches<br>(5.3 cubic feet)                 |
| AS-P30          | 100 X 148 X 1 mm<br>3.9 X 5.8 X 0.04 inches   | 10 grams<br>0.4 ounces            | 25 liters<br>1,526 cubic inches<br>(0.9 cubic feet)                  |
| AS-N30          | 55 X 91 X 1 mm<br>2.2 X 3.6 X 0.04 inches     | 3 grams<br>0.1 ounces             | 7 liters<br>427 cubic inches   |

# **Calculate Active-S Size for Your Requirement**

- measure enclosure inside dimensions
- Width(W) x Depth(D) x Height(H) = Cubic inches

#### **Example 1:**

Interior dimensions of cabinet: 20" Wide x 18" Deep x 24" High

Volume: 20 x 18 x 24 = 8,640 cubic inches

From the table, one AS-M will do up to 9,154 cubic inches

### Example 2:

Interior dimensions of cabinet: 18.5" Wide x 14" Deep x 24" High

Volume: 18.5 x 14 x 24 = 6,216 cubic inches

From the table, one AS-M will do up to 9,154 cubic inches but 14.6" width of AS-M is greater than 14" depth of cabinet so to install sheet on side surface use 4 of the AS-P sheets



When it comes to controlling humidity in enclosures, you don't need desiccants, dehumidifiers or hygrostats, all you need is Active-S humidity control sheets.

- Simplified installation
- No need for maintenance
- High performance over a long period of time
- Time and labor costs are significantly reduced
- Longest usage life
- Lowest applied cost solution for controlling humidity

#### **Precautions for Use**

- Take adequate measures to keep water out of cabinets before installing Humidity Control Sheet
- The standard application is intended for use in a sealed space. Changes in usage environments may affect results
- This product is not responsible for the failure of any device

#### Contact Fibersource to Order Active-S Humidity Control Sheets

Phone: 864-277-7200 Toll Free: 888-342-3776 orders@fibersource.net www.active-sfibersource.com

