

# AirMotion Big Smart Fans™ For Agricultural Facilities

Available in 9 ft, 12 ft, and 15 ft diameter, AirMotion Big Smart Fans (The Next Generation HVLS - High Volume Low Speed - Fans) are ideal for the agricultural facilities to provide comfort, increase productivity, and significantly reduce HVAC energy costs in summer and in colder seasons. Like human beings, barn animals and livestock also need to be comfortable to be productive. With the use of simple science and smart technologies AirMotion Big Smart Fans provide a complete and more effective air movement than other solutions for better comfort at lower costs so you get healthier, more productive animals.

## Key Agricultural Applications

- Dairy/Poultry/Piggery
- Barn/Ranch
- Fresh produce storage and packing facilities



## Key Benefits

- Highly efficient and effective human and animal/livestock comfort (Cooling in summer, better heating comfort in winter)
- Increased productivity (by comfortable animal, and facility staff)
- Significant reduction in HVAC energy bills
- Improved Indoor Air Quality (IAQ)/ventilation
- Healthier facility environment
- Reduced product spoilage and waste from humid and noxious air, birds, bugs and other pests
- Significant drying effect

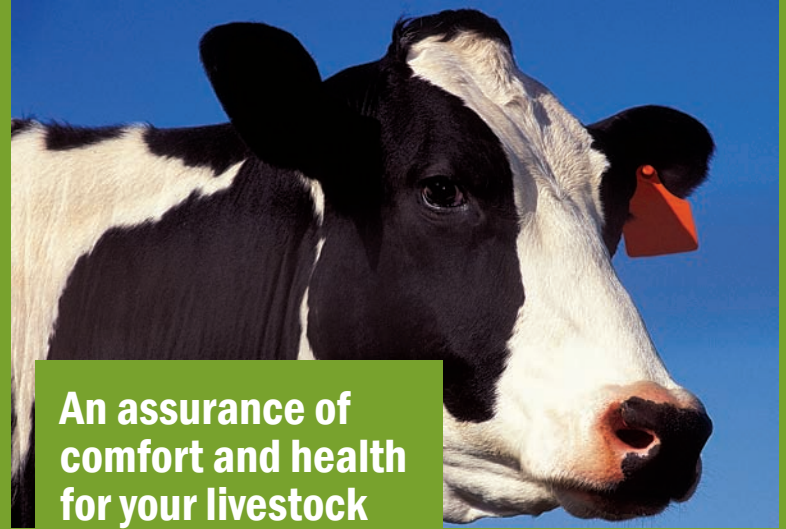
## Highlights

- Thanks to our VPT™ (Variable Pitch Technology), by controlling the direction, intensity, and reach of the air being moved, you get a complete and more effective air movement in your dairy barns and other livestock facilities, reducing/eliminating the need for drugs, pesticides, hormones, and other treatments - not desired by consumers - to improve comfort and related productivity.
- AirMotion Big Smart Fans provide faster payback and higher ROI (Return On Investment) than other solutions through their energy efficiency and cost savings.
- AirMotion big fans do not cause any electrical interference with sensitive monitoring and measuring equipment.

## Recommended Area

For typical cooling objectives we recommend one fan for up to 10,000 sq. ft. or more, and for heat destratification and general air mixing we recommend one fan for up to 20,000 sq. ft. or more as desired. One of our 15 foot fans can keep 60 or more cows cool. Please contact us for assessing your actual needs.

**AirMotion Big Smart Fans are one of the fastest, easiest, and least expensive ways for facilities to go green.**



**An assurance of comfort and health for your livestock**

A comfortable animal is a productive animal. For cows, research has shown that milk production can be increased significantly when heat stress is eliminated with cooling fans. Better comfort means better feeding, increasing animal productivity, and generating higher returns on your investment.

AirMotion Big Smart Fans are one of the most cost-effective and efficient means to create a more comfortable environment in dairy barns and other livestock facilities. By mixing and moving massive amounts of air they provide cooling breezes, healthier fresh air, improved drying effects, and the elimination of birds, bugs, and other pests, all making for conditions that are significantly more conducive to healthier, happier, and more productive animals. In winter climates, enjoy the added benefits of harnessing otherwise wasted heat to keep animals more comfortable and help prevent feed stocks and water from freezing.

All these benefits - and more - are provided by AirMotion Big Smart Fans - all done much more economically than other solutions. Improve your animals' living conditions while going greener with your energy savings and in your wallet. Your animals will love you for it!

## Key Specs (For 15 Ft Diameter Fan)

Number of blades	6 Rotatair™ Composite blades
Motor	One 1.5 hp TEFC High Efficiency
Fan Speed	20 RPM (min) to 120 RPM (max)
Blade Pitch	Variable (VPT™) 0° to 20° Up/Down
CFM (Cubic Feet per Minute)	340,000 @ 90 RPM and 20° Pitch (actual CFM depends on the Speed and Pitch of operation)
Approx. Fan Weight	250 lbs. (including Control Unit and Mounting Hardware)
Power Sources	120V Single Phase is standard (designed to work with all power sources)
Effective Coverage Area	Up to 20,000 sq ft or more (depending on Speed and Pitch)
Recommended Spacing	Up to 90 ft or more between fans (depending on Speed, Pitch, and air movement objectives)
Minimum Height	Top of unit 1 to 3 ft below roof level, blades minimum 10 ft above floor

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**Big fan performance...  
in a smaller package**



# Get Comfort and Save Energy with AirMotion Big Smart Fans™

## Smartest Features in the industry



**VPT™ (Variable Pitch Technology)**  
Lets you change the blade pitch 0° to 20° up/down to control the direction, intensity, and reach of the air movement



**Rotatair™ Composite Blades**  
Low turbulence design, equally effective in moving air up or down



**MultiMode Smart Control**  
Provides manual to fully automatic fan control with on-board smart electronics and temperature sensors

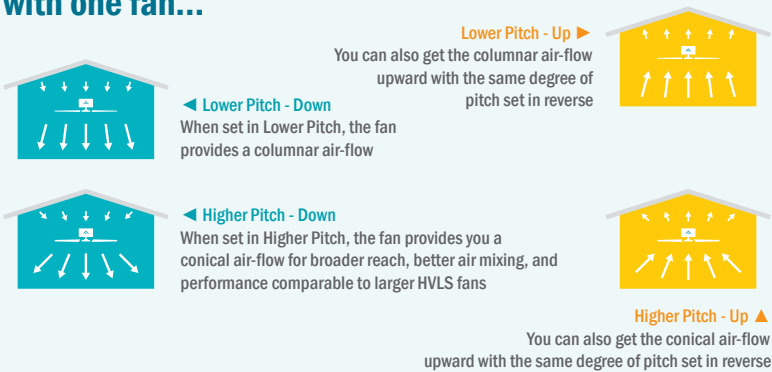


**Innovative Fan Sizes**  
Do not hinder the most common lighting and fire suppression set-ups

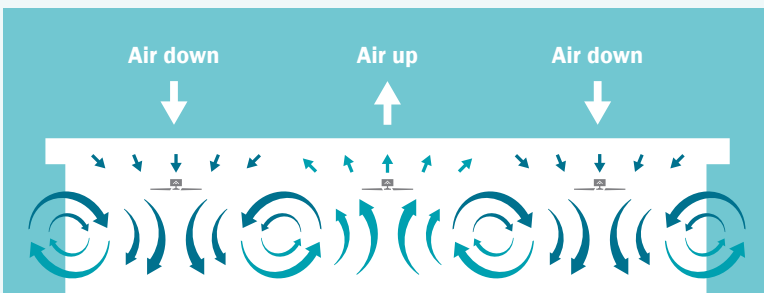


**Energy Efficient Eco Technology**  
Helps you leave a smaller carbon footprint

## By using Variable Pitch Technology™ AirMotion Big Smart Fans provide you Adjustable Air Movement with one fan...



## ...and Complete Facility Movement of air with multiple fans arranged in an array at your facility



With three or more fans arranged in an array you get an all-encompassing air movement and mixing throughout your facility by alternating air movement direction up and down - what we call Complete Facility Movement of air.

## A Fan For All Seasons



### Summer Cooling

By replacing up to 15 or more high-speed standard industrial fans one AirMotion Big Smart Fan provides all the breeze necessary for a natural cooling effect of 6°F to 8°F or more for happier, healthier, more productive facility staff/barn animals while significantly reducing HVAC energy bills in the warm months.

### Winter Heat DeStratification

In the colder months, better heating comfort can be obtained at high-roof facilities by running AirMotion big fans at lower speeds and/or altered pitch - including blowing air upwards - to bring trapped warmer air from the roof down to floor level (as hot air always goes up) and maintain a uniform temperature (called heat de-stratification) throughout the facility, while saving 20% or more in heating costs by reducing heater cycle time.



## AirMotion Big Smart Fans Provide Faster Payback and Higher ROI

BENEFITS	PAYBACK	10 YR COST SAVINGS
Cooling Alternative	< 3 Years	> \$ 125,000
Heat De-stratification	< 1 Year	> \$ 200,000
AC Alternative	< 1 Year	> \$ 400,000

\* Estimates for a typical 100,000 sq. ft. facility. Please contact us to learn more, and to evaluate the savings potential at your facility.

## AirMotion Smart Controller

It's a simple but multi-functional low voltage wall box control unit that is easily installed.

### (A) LCD Display

Provides information on fan speed, blade pitch, operating mode, temperature differences between the fan unit and the control unit, and other fan functions.

### (B) Power ON/OFF Button

### (C) Mode Selection Button

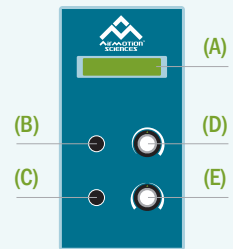
Selects any of the 4 operating modes - Manual, Eco, DeStrat, and Auto.

### (D) Speed Control Dial

Controls fan speed from 20 to 120 RPM.

### (E) Pitch Setting Dial

Sets the blade pitch from 0° to 20° up or down.



## Innovative Fan Sizes

The innovative sizes of AirMotion Big Smart Fans (available in 9 ft, 12 ft, and 15 ft diameter) allow them to fit within common lighting and sprinkler head spacing to avoid annoying strobe effect and unhappy fire marshals. We move lots of air with our fans. Thanks to our unique VPT™ (Variable Pitch Technology), they don't necessarily need to be so big to effectively harness the laws of physics to create comfortable and productive facility environments while saving energy significantly.

