

# Mitsubishi System Technologies:

a user-friendly zoned residential and light commercial  
personalized comfort solution (M-Series wall-mounted and ducted systems)

Comfort is a home that's cool and dry in the summer and cozy and warm in the winter. This environment is what you get with the Mitsubishi Electric system: perfect year-round comfort.

Mitsubishi Electric indoor units are easy to install practically anywhere:

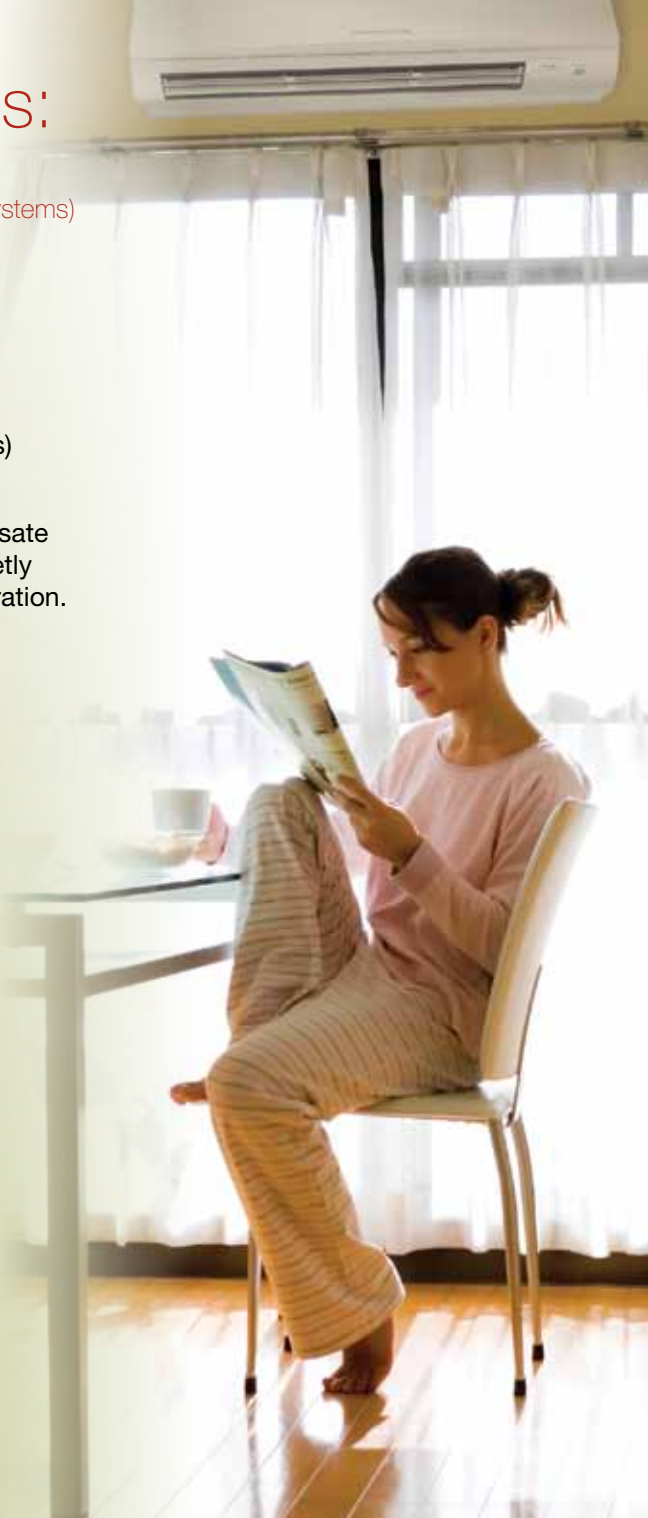
- High on the wall, to blend into a room without taking up window space
- In the ceiling or below the floor and totally out of sight (on ducted systems)

Heat pump systems feature auto mode cooling/heating changeover, which automatically switches the system between cooling and heating to compensate for fluctuating temperatures. They're nearly silent – their fans deliver air quietly and continuously with only a gentle whoosh for constant circulation and filtration. For this reason, Mitsubishi ductless systems have long been the choice of thousands of homes, churches, schools and libraries across the U.S.

Our systems are the perfect way to cool or heat any single room or multiple rooms in your home or office to attain personal comfort.

## Technology Benefits of Mitsubishi Systems

Features	Benefits
INVERTER TECHNOLOGY IN THE COMPRESSOR	Maximizes energy savings by making sure only the energy needed to cool or heat an area is used.
EASY INSTALLATION FOR YOUR CONTRACTOR	Installs quickly and easily, having no need for major construction and remodeling.
COMPLETE ZONE CONTROL	Realizes maximum control and energy efficiency by cooling and heating only those spaces in use.
ADVANCED MICROPROCESSOR TECHNOLOGY	Creates a comfortable environment no matter what conditions are outside with our advanced self-monitoring controls.
PERSONAL COMFORT CONTROL	Convenient comfort control of temperature, fan speed and air direction in the specific zone with our remote or wired controller.
WASHABLE LONG-LIFE ANTI-ALLERGEN FILTERS	Improves air quality and saves money by being washable rather than having to replace the filter.
AUTO COOL/HEAT CHANGEOVER	Heat pump switches automatically from cooling to heating (MUZ Systems).
ENVIRONMENTALLY FRIENDLY REFRIGERANT	Uses R410A, an environmentally friendly refrigerant and a high percentage is recycleable.



## Cutting-edge Technology

In every aspect of a Mitsubishi Electric system, advanced technology is used to increase energy efficiency and eco-friendliness while providing innovative comfort control.

Our technology includes:

- INVERTER-driven compressors
- tremendous heating performance in Hyper-Heating INVERTER (H2i®) systems
- expanded filter systems
- i-see™ sensor accessory (select models)

## Innovative Compressor Technology

INVERTER-driven compressor systems in the outdoor unit detect subtle changes in temperature and, like a car's cruise control, automatically adjust compressor speed – unlike conventional units, which start and stop repetitively. Special components within the compressor increase the magnetic flux and reduce its weight, allowing the compressor to generate higher energy efficiencies with better performance than ever before – at low levels of sound during start-up and running.

# INVERTER



# COMFORT CONTROL ENERGY EFFICIENT



## ZONING

## EASY INSTALLATION

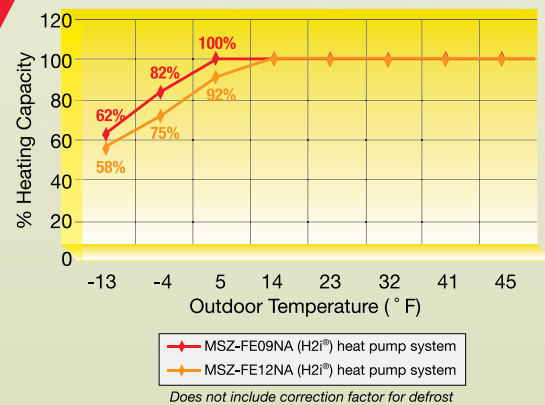
### Heat, and Lots of It

With the advanced technology added to the already innovative INVERTER compressor the MSZ-FE high-efficiency systems are not only ENERGY STAR® rated and Tax Credit qualified, providing up to 26 SEER, they can provide exceptional heating performance.



These systems provide heating to -13° F and produce up to 100% heating capacity at 5° F (MSZ-FE09; 92% capacity at 5° F for MSZ-FE12). That is year-round comfort in extreme climates while being extremely energy-efficient.

### MSZ-FE Hyper-Heating INVERTER % Heating Capacity vs. Outdoor Temperature



### Energy Efficiency Recognized

Mitsubishi Electric ductless cooling-only and heat pump systems are so energy efficient that **nine systems** – 45 percent of our residential INVERTER-driven systems – are ENERGY STAR rated.

### Extra Energy Savings

**Eight (8) Mitsubishi Electric residential M-Series systems qualify for the Economic Stimulus Tax Credit. By investing in your home's energy efficiency, you could qualify for up to \$1,500 in federal tax credits.**

For details on how to qualify, visit [www.mitsubishicomfort.com/taxcredit](http://www.mitsubishicomfort.com/taxcredit) or ask your contractor.

For information on available local rebate opportunities from state or utility companies, visit [www.dsireusa.org](http://www.dsireusa.org).

### i-see Sensor

i-see™ Sensor (MSZ-FE09/12NA models only)

The i-see sensor detects temperature variations in hard-to-control ceiling and floor areas while controlling the airflow up to a wide 150° lateral angle for ultimate comfort (90° angle in cooling mode).

By scanning the room and making adjustments based on ambient temperature readings, MSZ-FE systems achieve superior cooling/heating performance with extremely efficient operation.





# Superior Operation

## Advanced Control Technology

Through Mitsubishi's advanced controls technology the indoor unit is powered by the outdoor unit. Three polarity sensitive wires plus a ground conductor run from the outdoor to the indoor unit, providing both power and communication. An advanced wireless remote control is standard on all ductless models. An optional wired on-the-wall controller is available for wall-mounted indoor units on INVERTER systems (also requires MAC-397 adapter) while standard on ducted units.



## Quiet Operation

Do you hear that? No? You barely hear our systems because Mitsubishi indoor units operate with barely a whisper. For example:

Police siren	118 decibels
Circular saw	107 decibels
Vacuum cleaner	74 decibels
Library reading room	33 decibels
Whisper-tone voice	35 decibels
<b>Our Indoor Units</b>	<b>19 - 34 decibels</b>
(at low speed)	

Did you hear that? We hope you did.

## Warm Air, No Drafts

Our hot-start heat pump technology provides warmth from the beginning. The fan increases in speed as the coil is warmed, reducing drafts so when you want warm air, you'll get it.

## System Control in the Palm of Your Hand

Mitsubishi Electric offers a comprehensive remote controller that controls temperature, fan speed and more. Choose from four modes: COOL, HEAT, AUTO and DRY. The controller also has a 12-hour ON/OFF timer for one-button control of your personal comfort.

## Auto Changeover on Heat Pump Systems (MUZ outdoor units)

Our heat pump systems sense whether a space needs cooling or heating and automatically switch modes as needed to maintain a consistent temperature within the selected range of a single zone.

## Easy to Maintain

With easily accessible filters, little or no ductwork to clean, and uncomplicated wiring connection points between the indoor and outdoor units, Mitsubishi systems rely on minimal maintenance, providing another level of comfort.



# Total Comfort

## Additional Air Circulation

With the WIDE VANE or SWING mode, available on the MSY(Z)-GA24/D30/36NA, there is an option for seven horizontal airflow directions that provide 150° of airflow for greater conditioned air circulation.

## Programmable Comfort

Smart Set featured on MSZ-GE systems provides the option to program multiple settings into one 'quick' press feature providing an additional level of comfort control.

The POWERFUL mode (found on select systems) is available to cool or heat any desired space quickly by lowering the set temperature in cooling mode or raising the set temperature in heating mode, both by 7° F. In Powerful Mode, the fan speed increases for 15 minutes then resumes standard operation.

## Multiple Filters for Cleaner, Healthier Air

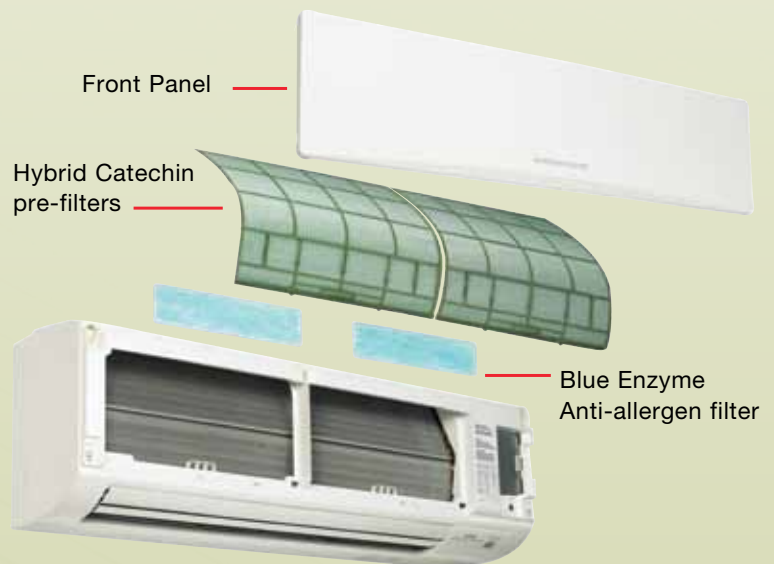
Mitsubishi indoor units use a sophisticated multi-part filter system to remove contaminants such as allergens, viruses and bacteria from the air as it circulates.

The hybrid catechin pre-filter absorbs odor-causing gases. A Blue-Enzyme anti-allergen filter reduces germs, bacteria and viruses and helps trap dust, pollens, mites and other particles; the filter uses an enzyme catalyst to help break down the sulfur atom bonds in allergen proteins, transforming them into non-allergen proteins.

A hybrid-coating process makes the catechin filter washable and, if properly maintained with monthly cleanings, effective for more than 10 years.

The high-efficiency MSZ-FE09/12NA indoor units incorporate the standard Catechin filter plus two more filters for triple filtration. The second filter, a Blue-Enzyme filter made of a fibrous material, also render allergens harmless using enzymes. The third filter, a Platinum Catalyst Deodorizing filter, has a ceramic surface absorption element and uses nanotechnology for high power odor absorption. This combination of filter types provides a complete air purifying system along with the ultimate comfort solution.

### STANDARD FILTER SYSTEM (USED IN MSY/MSZ-GE/GA/D MODELS)



### ENHANCED FILTER SYSTEM (USED IN MSZ-FE09/12NA MODELS)

