

FUJITSU

Halcyon 



Mini-Split Air Conditioners and Heat Pumps
for Residential and Light Commercial Applications





Halcyon 

*Where comfort and style meet
performance and reliability.*





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Fujitsu Mini-Splits: Year-Round, Whole-Home or Business Energy Efficient Heating and Cooling

What is a Mini-Split?

Halcyon systems eliminate the need for a basement or attic-located evaporator unit and bulky ductwork by using thin copper tubing that pumps refrigerant directly to discreet wall mounted or concealed units inside. Even more remarkable, this same unit works in reverse in winter, absorbing heat from the outside air and moving it indoors to heat your home. The result? Efficient cooling and heating for year-round, whole-house comfort in most climates.

Available in numerous mix-and-match capacities and configurations, there's a Halcyon mini-split system for even the most difficult to heat and cool areas.



How Does a Mini-Split Work?

Like your refrigerator, heat pumps use electricity to pump refrigerant and transfer heat from one space to another. When we transfer heat from within our home to the outdoors, we call it "air conditioning". Conversely, when we transfer heat from the outdoors to within the home, we call it a "heat-pump".

Wall Mount Unit

evaporator/
fancoil (indoor)

refrigerant lines,
electric, drain

compressor/
condenser
(outdoor)

Unit Can Be Showcased...

Wall mounted units eliminate the need for ductwork, mount high on a wall and deliver all of the cooling you pay for.

Compact Duct Unit

air
return
grille

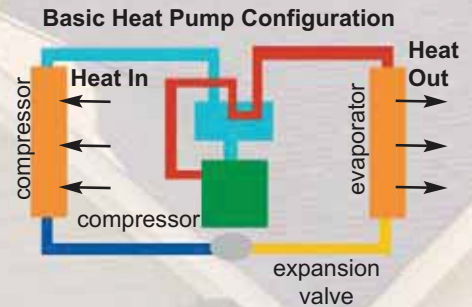
...or Hidden

Compact Duct units are mounted above a ceiling or in a framed enclosure below a ceiling, so only the grilles show for a clean look. They require minimal ductwork.

air
supply
grille

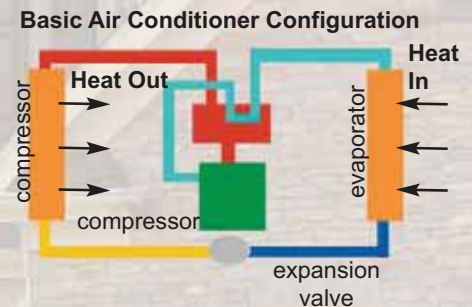
Heat Pumps Provide Heat When it is Chilly

Because refrigerant is naturally much colder than outdoor temperatures even on a very cold day, it actually absorbs heat from outdoors, and transfers the heat it absorbs outside to within your home. The refrigerant's physical properties do this naturally. What you pay for is the electricity to pump refrigerant via copper tubing from outdoors to indoors. Because we move the heat rather than create it (as electric baseboard or resistant heat does), we can deliver up to 4 times the heat for the energy we consume!



Air Conditioners Provide Cooling When It's Warm

Come spring and summer, simply reverse the process and put the same system into "cooling mode" and transfer heat from indoors to the outside. For many climates, the advanced technology that goes into these units creates a far more cost effective alternative to either gas or oil-fired units for heat, or a central ducted system for air conditioning. Fujitsu's mini-splits come in both cooling-only models or heat pumps, which provide both heating and cooling.



Electric Heaters versus Heat Pumps



An electric heater converts electricity directly to heat, and if we assume that the heat loss is zero, the output from one kilowatt input is one kilowatt or 3,400 BTU and the EER is 3.4.



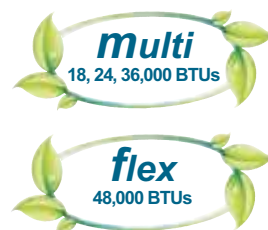
Heat pumps are more efficient than some other forms of heating because heat pumps do not actually create heat - they just move it from one place to another. For example, the output of an efficient 10 EER heat pump is triple that of an electric heater.

**EER (Energy Efficiency Rating) = Rated BTU capacity divided by total kW input.*

Individual Zoning: Personalized Whole Home Comfort

Halcyon HFI Systems are some of today's most advanced forms of heating and air conditioning. One outdoor unit can operate up to 8 indoor units simultaneously. Fujitsu's HFI Systems are super quiet as well as highly energy efficient.

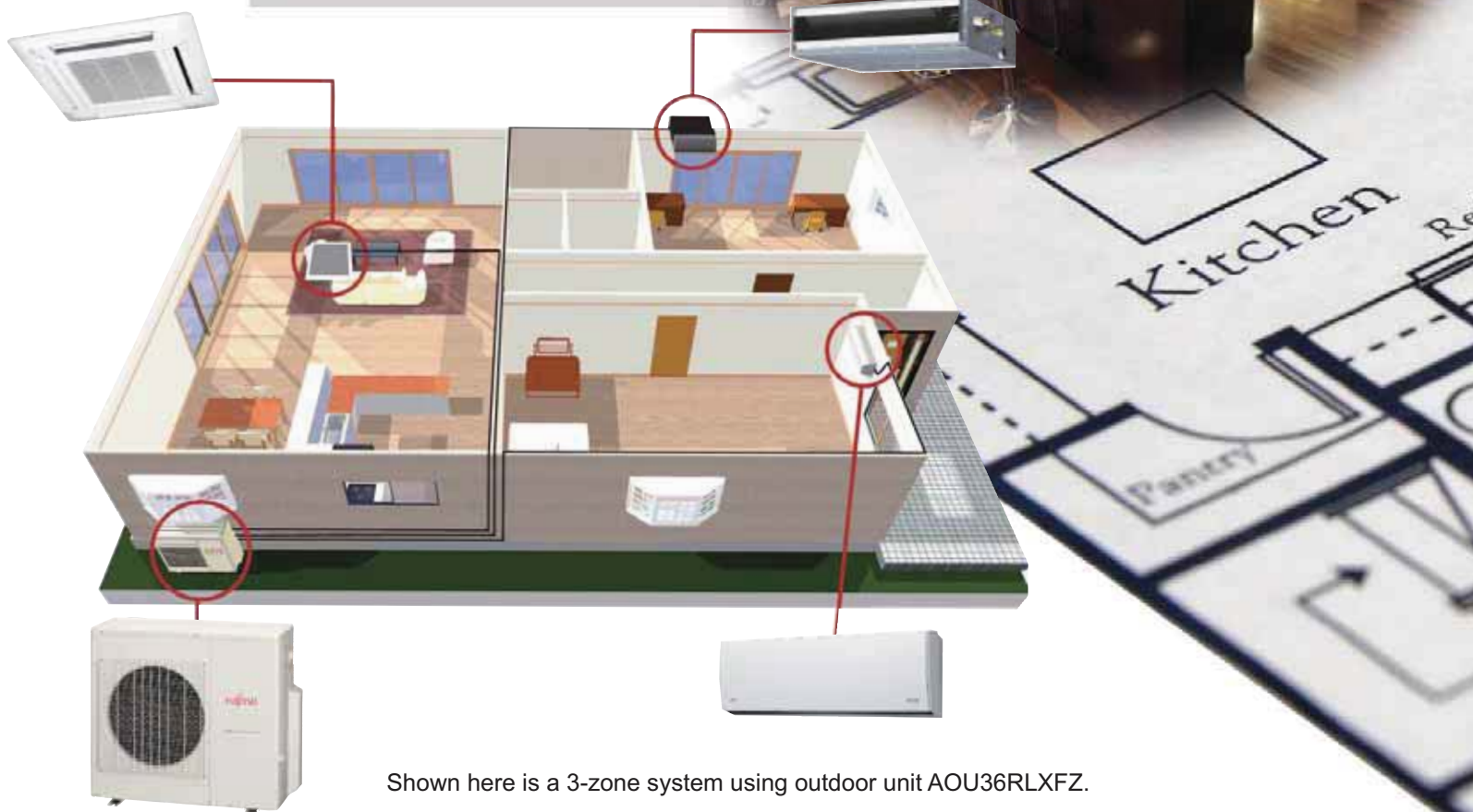
- Each indoor unit can be operated independently via remote control
- Choose from a variety of indoor unit styles
- Provide both heating and cooling (not simultaneously)
- High energy efficiencies
- Quiet operation



Wall Mounted

Stylish, slim and elegant, wall mounted units are designed to complement any interior décor.

- Compact size
- Wireless remote control
- Automatic swinging louvers



Shown here is a 3-zone system using outdoor unit AOU36RLXFZ.



Compact Duct

Mounted in a ceiling or in a framed enclosure below a ceiling. They use minimal ductwork and remain very energy efficient.

- Concealed and out of sight
- Look of central air with the efficiency of a mini-split
- Less ducts = higher efficiency

Wall Mounted

They mount high on a wall, out of sight and do not require ductwork, increasing energy efficiency.

- Quiet operation
- Easy maintenance
- High delivered efficiency means lower utility bills



Compact Cassette

Cassettes are extremely discreet, with only the grille showing in the ceiling. They use the latest fan technology to distribute the conditioned air evenly.

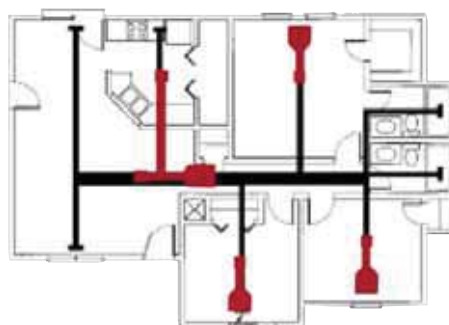
- Wired remote controller (wireless is optional)
- Powerful turbo fan operation
- Fits into a standard 2' x 2' ceiling grid

A Solution for All of Your Comfort Needs

Ductless Technology

Don't waste money cooling and heating the ducts in your walls and attic. Fujitsu systems are duct-less, meaning they install easily and won't take up valuable closet space. Since mini-splits have little to no ducting, they forego those energy losses typically associated with central forced-air systems. Duct losses in a central air system can easily account for more than 30% of energy consumption, especially if the ducts are not sealed tight or in an unconditioned space such as an attic or crawlspace.

Central Air System versus Fujitsu HFI Quad Zone

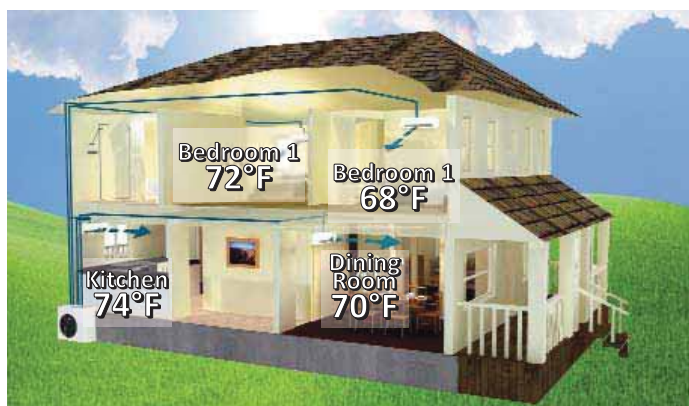


Thick black lines represent ducts of a Central Air System.

Red lines represent mini-ducts of a Fujitsu Quad Zone Compact Duct System.

Whole Home or Business Comfort

Fujitsu's Halcyon HFI systems provide home and business owners just the right amount of heating and cooling needed by installing 2 to 8 indoor units connected to one outdoor unit. Indoor units vary by size and style and each creates its own "zone" of comfort, allowing you to heat or cool individual rooms, hallways and open spaces.



A Year Round Solution

Revolutionary Halcyon heat pumps provide both heating and cooling for year round comfort in most climates. A simple push of a button on the remote control allows you to switch from heating to cooling (or vice versa) automatically.



Energy Efficient: The Smart Choice in Comfort

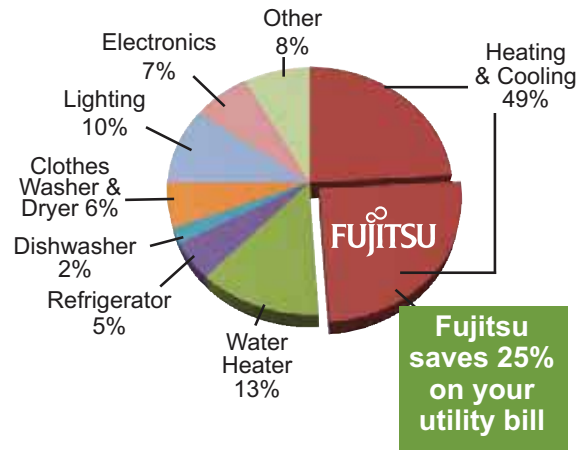
As much as half of the energy used in your home goes to heating and cooling. So, making smart decisions about your home's heating and air conditioning system can have a big effect on your utility bills — and your comfort.

Where Does My Money Go?



The high energy efficiencies of Halcyon systems slash utility bills by up to 25%. If your average annual utilities are \$4,200, Fujitsu can save you up to \$1,050 annually or \$10,500 in 10 yrs!*

*Savings may vary based on model selected, hours of operation and geographical location. Example given based on 26-SEER system versus 13-SEER system.



Rebates

To encourage customers to buy energy efficient products, many local utility companies offer significant rebates for the purchase of a ductless mini-split system. Go to Fujitsu's web site to search for local rebates, consumer loans and utility bill discounts. We provide a listing of rebates and offerings on qualifying Fujitsu mini-splits by state. www.fujitsugeneral.com/utility_rebates.htm



Federal Tax Credit Up To \$300 through 2013

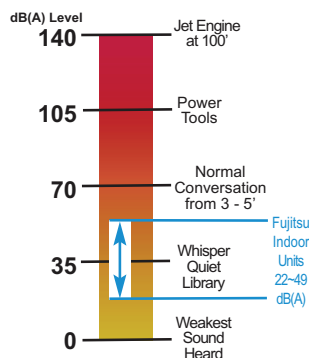
A tax credit can provide significant savings. It reduces the amount of income tax you have to pay. Unlike a deduction, which reduces the amount of income subject to tax, a tax credit directly reduces the tax itself.

- Federal tax credits are effective for systems purchased through December 31, 2013 for "Qualified Energy Property"
- The federal tax credit for qualified equipment is 10% of the amount paid but shall not exceed \$300 for the qualified energy property.
- Fujitsu has 16 qualifying systems in 2013
- Check with your tax professional for details and visit www.energystar.gov and click on "Tax Credits" for additional information.

Comfort and Convenience

Flexible and Quiet

Mini splits offer flexibility because they can be suspended from a ceiling, mounted flush behind a drop ceiling, hung on a wall or floor-standing. Ductless heat pumps allow for a peaceful inside environment by enabling the contractor to install components like compressors and motors outdoors.

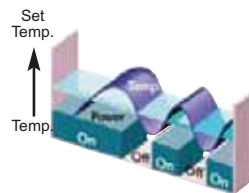


Constant Comfort through Inverter Technology

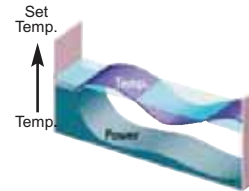
Inverter technology is like cruise control for your heating or cooling system. Compressors only run as fast as they need to handle the cooling or heating demand. They can handle greater extremes in temperature, are smoother and more stable in operation, and reach the desired temperature more quickly than conventional air conditioners.

Inverter Benefits

- More heat at lower outdoor temperatures
- Lower RPMs = quieter operation
- Desired temperature in half the time
- Up to 30% more efficient
- Stable temperature



Conventional System



Inverter System



User Friendly Control

Fujitsu is using ergonomics to expand the use of user friendly designs such as easy-to-read large LCD displays, easy-to-operate buttons, and displays with easily recognizable colors and icons. We are producing control systems that provide greater convenience for both individual and centralized control with operability suitable for the application.



Optional Wired Remote UTY-RVNUM

Standard Wireless Remote for RLS2 and RLS2H Systems



Applications



Where can mini-splits be used?

Convenience stores
Fast food chains
Fire houses
Police stations
Oil rigs
Bars
Sunrooms and additions
Warehouses
Nursing homes
Small offices
Older homes
New construction homes
Schools
Places of worship
Hospitals and medical facilities
Restaurants
Computer rooms
Hotels and motels
Car washes
ATM vestibules

Just about any place that requires comfort!

