FUJITSU

THE POSSIBILITIES ARE INFINITE

Refrigerant R410A

Tentative

# INVERTER

# Heat Pump 2 Room Multi System

FUJITSU GENERAL LIMITED

# PRODUCT FEATURES

## THE INTELLIGENT CHOICE IN COMFORT

That's what Fujitsu air conditioners have to offer. The Fujitsu inverter multi system promises to make your life more comfortable.
Featuring advanced DC inverter technology, we offer you more power and more efficiency than

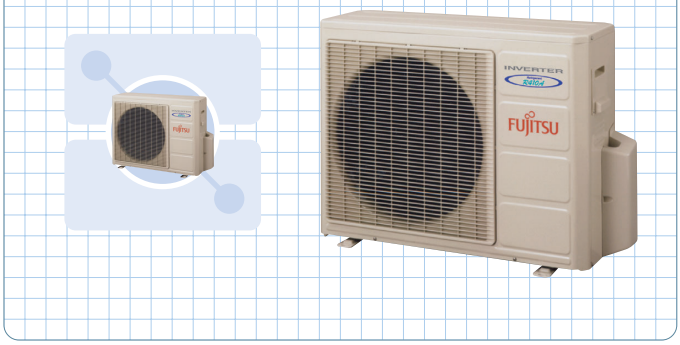
## *Features*

### DC Inverter Multi System

The Fujitsu Inverter System is equipped with a state of the art DC Twin Rotary Compressor. It can reach the room temperature you set 15% quicker than conventional models and precisely maintain it at a difference of just 0.5℃. Advanced DC Twin Rotary Compressor makes operation at High Power and High Efficiency a reality.

## High power, High COP & Energy Saving

### Outdoor Unit : AOY24LMAM2

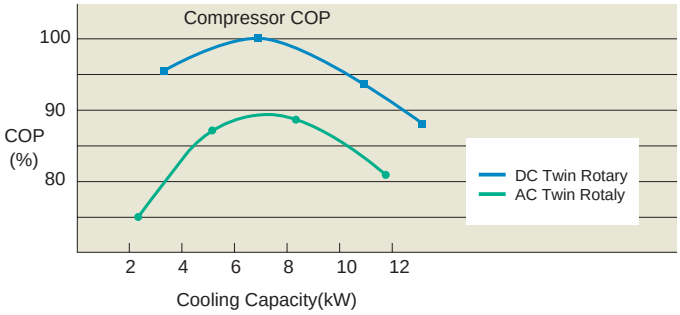



- European Energy label regulation **RANK A** .
- Maximum output capacity in industry.
  **7.9kW (Cooling)  8.8kW (Heating)**
- Adopting higt efficient DC twin rotary compressor.
- Adopting an inverter circuit of PAM (Power Active Module) system.
- High Efficiency DC Inverter Multi system permits energy saving operation and 50% higher efficiency than a Constant-Speed Multi system. Improved Inverter cooling ratio prevents decrease in capacity under overload operation.

**High COP**

| | New model |
|---|---|
| Cooling | 3.49 |
| Heating | 3.98 |

**Comparison of cooling efficiency of DC compressor (against AC compressor)**

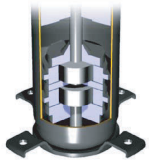



**Capacity (at 230V)**

| | Rated | Max. |
|---|---|---|
| Cooling | 5.8kW | 7.9kW |
| Heating | 6.4kW | 8.8kW |

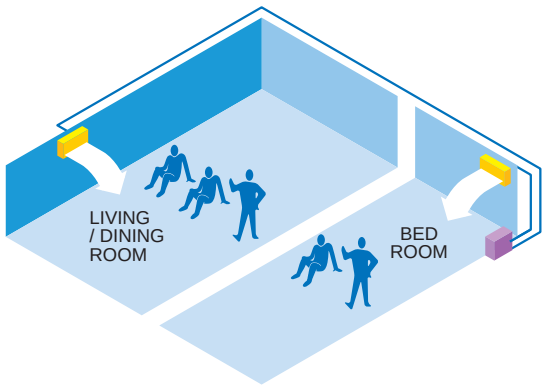
**Energy Saving Over a Year's Time**


**DC twin rotary compressor**



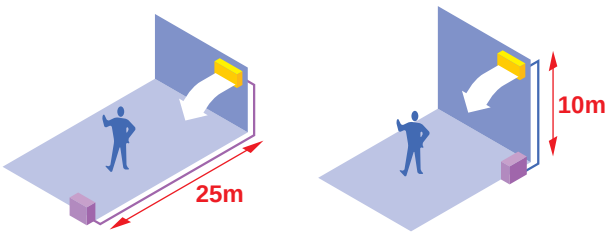
## Flexible Use

- The indoor unit which can be connected to one outdoor unit is selectable only 2 types from 4 kinds of capacity types.




## Flexible Installation

By means of 30m (gas charge-less 30m) long piping, the outdoor unit can be installed in a wide range of properties.




Maximum Piping Length
Each Unit : 25m

Maximum Height : 10m

Total Piping Length : **30m**

**Prevents EMI to television sets, radios, and computers meeting European EMC Standards and improves resistance against extraneous noise.**

# Indoor Unit

## Wall Mounted Type Large Size :

**ASY18LMA-W**
C 5.2kW (17,800BTU/h)
H 5.8kW (19,800BTU/h)

## Wall Mounted Type Small Size :

**ASY7LMACW**
C 2.2kW (7,500BTU/h)
H 2.6kW (8,500BTU/h)

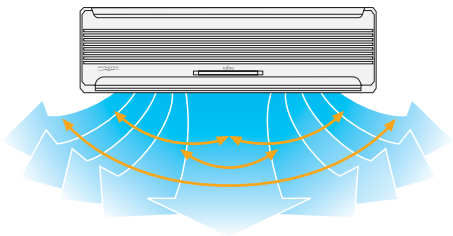
**ASY9LMACW**
C 2.7kW (9,200BTU/h)
H 3.3kW (11,300BTU/h)

**ASY12LMACW**
C 3.5kW (12,000BTU/h)
H 4.1kW (14,000BTU/h)

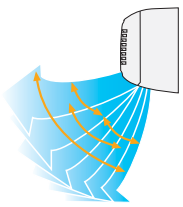
## Multi Airflow

Vertical and horizontal air direction control supplies regular airflow and suppresses temperature changes even in a large room.
*Except for ASY7 / 9 / 12LMACW

*Right and Left*



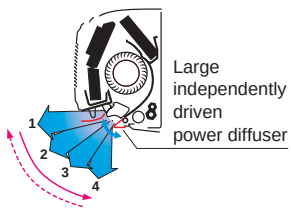
*Up and Down*

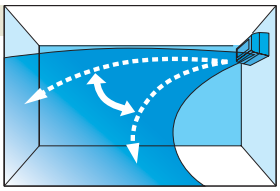


*Steps* *Swing*

### Large independently driven power diffusers used

**Cooling**

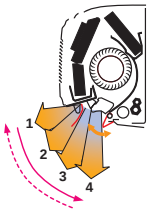


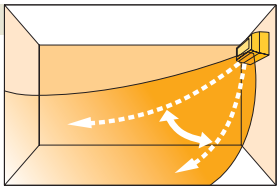



Horizontal concentration and other air direction control

Steps
Swing

**Heating**

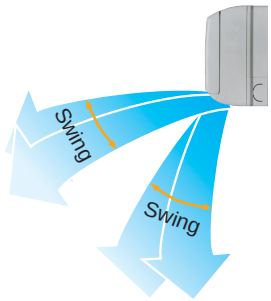


Wide down flow

## Auto Swing Louver

It is possible to obtain the optimum air flow direction corresponds to the each operation mode by using the "Auto Swing Louver" function.
*Except for ASY18LMA-W

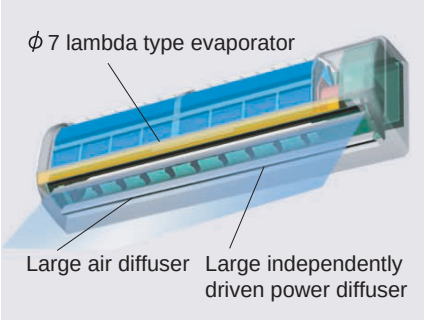



*Steps* *Swing*

*Cooling mode : 2-step air directions*
*Heating mode : 4-step air directions*

## Operation sound (Low noise)

- Hi : 42dB - 18type actual data
- High efficiency fan construction ⇒ $\phi$7mm Lambda type evaporator improves the airflow path
- Large air diffuser



## Auto-Changeover

The optimum operation mode based on your temperature setting is automatically selected and pleasant air conditioning is performed.

## Auto Restart

In the event of a temporary power failure, the air conditioner will automatically restart in the same operating mode as before, once the power is restored.

## Quiet Operation

In quiet mode :
ASY7LMACW **[27dB (A)]**, ASY9LMACW **[31dB (A)]**

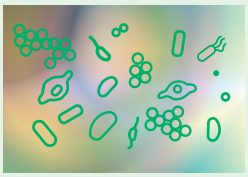
## Easy installation

Larger space at base of housing means extra 15% piping space.

## "WASABI"filter & Light-regenerated deodorizing filter

### "WASABI"filter

Bacteria in air / Type of mold etc



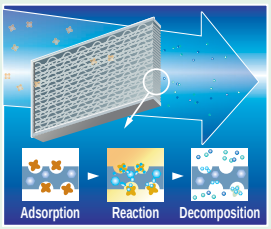
| | | |
|---|---|---|
| Yellow staphylococcus | $1.6 \times 10^4$ | 95% or more |
| Colon bacillus | $2.5 \times 10^4$ | 99% or more |
| MRSA ( Virus ) | $2.3 \times 10^4$ | 99% or more |

Rate of removal

Conforms to Japan Spinners Inspecting Foundation (Test No.016928-1,-2,-3)

Exchange timing : **Once / three months**

### Light-regenerated deodorizing filter



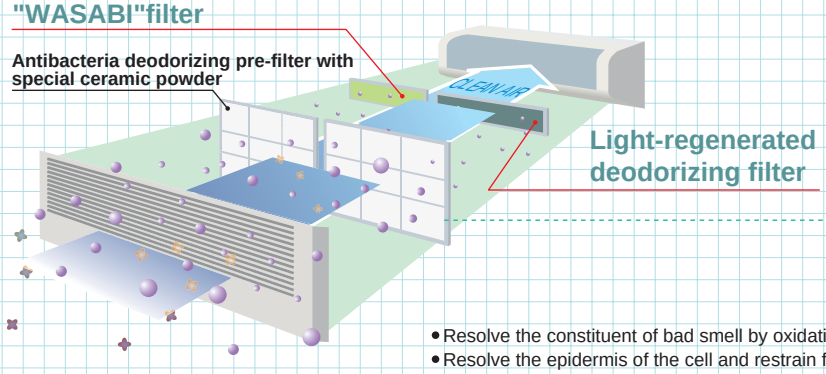

Deodorizing effect (Malodor reduction speed)

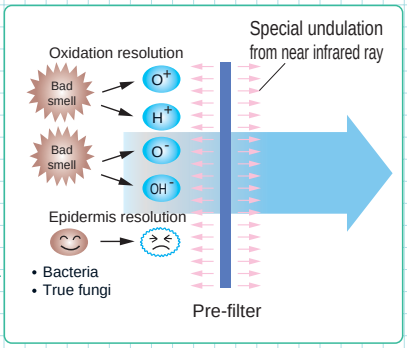
| Bad smell | 0 minutes−After 30 minutes | |
|---|---|---|
| | Initial value (Rate of content) | Rate of removal |
| **Ammonia** | **21.4ppm/m³** | **60% or more** |
| **Acetaldehyde** | **6.1ppm/m³** | **35% or more** |
| **Acetic acid** | **1.5ppm/m³** | **75% or more** |

Conforms to The Japan Electrical Manufacturers' Association's standard JEM1467 ; Deodorizing Performance Test

Cleaning and maintenance : **Deodorization capability is reproduced by illuminating the sunlight of about 6 hours to a filter every 6 months. (Repeated use available for about 3 years)**

### Mechanism of deodorization and anti-bacteria



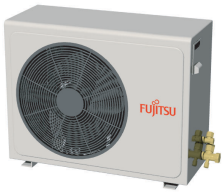




- Resolve the constituent of bad smell by oxidation and restoration reaction.
- Resolve the epidermis of the cell and restrain from propagation of bacteria / mould.

# Outdoor Unit

● Outdoor Unit : AOY24LMAM2

## Compact Design

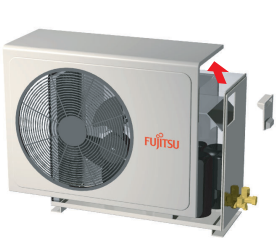


Existing Model
H643 x W840 x D336

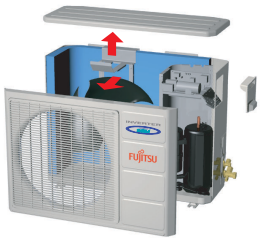
**NEW Model**
**H650 x W830 x D320**

## Easy Installation and Easy Maintenance

Improving the maintenance by being made the attachment and detachment of top panel to easy operation.



Existing Model



**NEW Model**

## Corresponding with low outdoor temperature

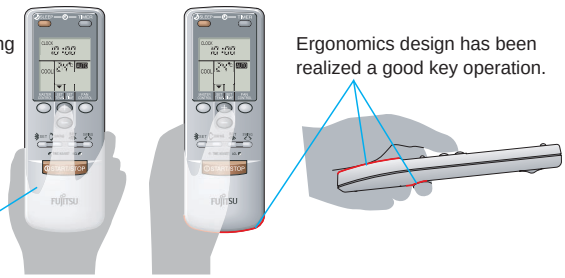
Cooling operation : **0℃**, Heating operation : Corresponding to **-10℃**

# Wireless Remote Controller

## Compact and Ergonomics Designed Form (Example is ASY18LMA-W)

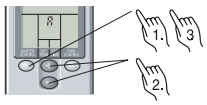
Good matching for your palm

2 batteries



Ergonomics design has been realized a good key operation.

## Transmission Code Change (Except for ASY7 / 9 / 12LMACW)



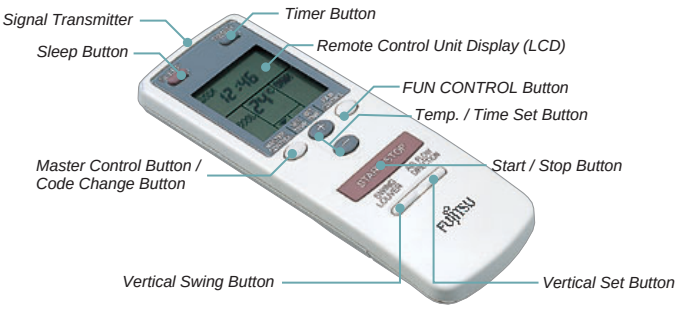

1.Press the MASTER CONTROL button or more five seconds to start the code change.

2.Press the (+) or (-) button to select the desired code. → A → B → C → D

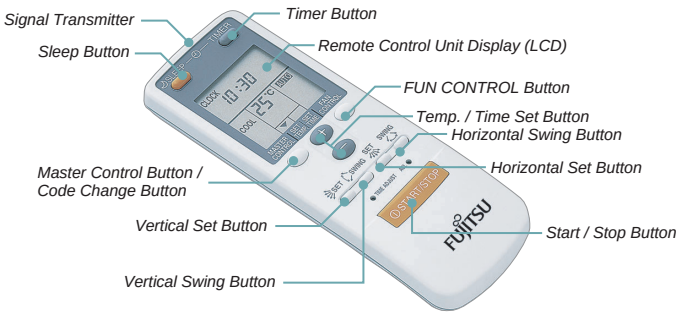
3.Press the MASTER CONTROL button again to end the code change.

## Function Buttons

● ASY7 / 9 / 12LMACW




● ASY18LMA-W



# Capacity Table *Tentative (1 ϕ 50Hz 230V)*

Only the combination of 2 indoor units can connected with 1 outdoor unit.

● **SYSTEM 2 : 1 outdoor unit to 2 indoor units.**

**SYSTEM 2** — **1 outdoor unit to 2 indoor units.**

**Combination of Indoor Unit**

| | | | | |
|---|---|---|---|---|
| Room A | ASY7LMACW C 2.20kW H 2.60kW | or ASY9LMACW C 2.70kW H 3.30kW | or ASY12LMACW C 3.50kW H 4.10kW | or ASY18LMA-W C 5.20kW H 5.80kW |
| Room B | ASY7LMACW C 2.20kW H 2.60kW | or ASY9LMACW C 2.70kW H 3.30kW | or ASY12LMACW C 3.50kW H 4.10kW | |

## Cooling Mode

| AOY24LMAM2 | Indoor Unit | | Unit each capacity (kW) | | Capacity (kW) | | | Current (A) | | | Input (kW) | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 1 | 2 | Min | Rated | Max | Min | Rated | Max | Min | Rated | Max |
| Only 1 indoor unit in operations / 2 indoor units connected | 7 | – | 2.20 | – | | 2.2 | 2.5 | | 3.8 | 4.1 | | 0.86 | 0.93 |
| | 9 | – | 2.70 | – | | 2.7 | 3.0 | | 4.2 | 4.6 | | 0.95 | 1.04 |
| | 12 | – | 3.50 | – | | 3.5 | 4.0 | | 5.1 | 5.8 | | 1.15 | 1.31 |
| | 18 | – | 5.20 | – | | 5.2 | 5.9 | | 7.1 | 8.7 | | 1.62 | 1.97 |
| SYSTEM 2 | 7 | 7 | 2.20 | 2.20 | | 4.4 | 5.0 | | 6.0 | 6.9 | | 1.37 | 1.57 |
| | 9 | 7 | 2.70 | 2.20 | | 4.9 | 5.3 | | 7.0 | 7.3 | | 1.58 | 1.65 |
| | 9 | 9 | 2.70 | 2.70 | | 5.4 | 6.0 | | 7.2 | 9.5 | | 1.63 | 2.16 |
| | 12 | 7 | 3.10 | 2.30 | | 5.4 | 6.1 | | 7.2 | 8.7 | | 1.63 | 1.99 |
| | 12 | 9 | 3.00 | 2.50 | | 5.5 | 6.9 | | 7.2 | 11.2 | | 1.64 | 2.56 |
| | 12 | 12 | 2.80 | 2.80 | | 5.6 | 7.4 | | 7.2 | 12.3 | | 1.64 | 2.80 |
| | 18 | 7 | 4.00 | 1.70 | | 5.7 | 7.7 | | 7.3 | 12.3 | | 1.66 | 2.80 |
| | 18 | 9 | 3.80 | 2.00 | | 5.8 | 7.8 | | 7.3 | 12.3 | | 1.66 | 2.80 |
| | 18 | 12 | 3.50 | 2.30 | | 5.8 | 7.9 | | 7.3 | 12.3 | | 1.66 | 2.80 |

## Heating Mode

| AOY24LMAM2 | Indoor Unit | | Unit each capacity (kW) | | Capacity (kW) | | | Current (A) | | | Input (kW) | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 1 | 2 | Min | Rated | Max | Min | Rated | Max | Min | Rated | Max |
| Only 1 indoor unit in operations / 2 indoor units connected | 7 | – | 2.60 | – | | 2.6 | 3.2 | | 4.8 | 5.8 | | 1.08 | 1.31 |
| | 9 | – | 3.30 | – | | 3.3 | 4.0 | | 5.6 | 6.9 | | 1.26 | 1.56 |
| | 12 | – | 4.10 | – | | 4.1 | 4.6 | | 6.6 | 7.7 | | 1.49 | 1.74 |
| | 18 | – | 5.80 | – | | 5.8 | 7.5 | | 7.9 | 12.3 | | 1.80 | 2.80 |
| SYSTEM 2 | 7 | 7 | 2.60 | 2.60 | | 5.2 | 6.4 | | 6.9 | 9.2 | | 1.57 | 2.09 |
| | 9 | 7 | 3.20 | 2.50 | | 5.7 | 7.2 | | 7.2 | 10.8 | | 1.63 | 2.47 |
| | 9 | 9 | 3.15 | 3.15 | | 6.0 | 7.8 | | 8.4 | 12.4 | | 1.91 | 2.82 |
| | 12 | 7 | 3.60 | 2.60 | | 6.2 | 7.8 | | 8.3 | 12.4 | | 1.88 | 2.82 |
| | 12 | 9 | 3.40 | 2.90 | | 6.3 | 7.9 | | 8.2 | 12.4 | | 1.86 | 2.82 |
| | 12 | 12 | 3.20 | 3.20 | | 6.4 | 8.2 | | 8.1 | 12.4 | | 1.84 | 2.82 |
| | 18 | 7 | 4.30 | 2.00 | | 6.3 | 8.7 | | 7.2 | 12.4 | | 1.63 | 2.82 |
| | 18 | 9 | 4.10 | 2.30 | | 6.4 | 8.8 | | 7.1 | 12.4 | | 1.61 | 2.82 |
| | 18 | 12 | 3.80 | 2.60 | | 6.4 | 8.8 | | 7.0 | 12.4 | | 1.60 | 2.82 |

Indoor Unit "7"=ASY7LMACW Indoor Unit "9"=ASY9LMACW Indoor Unit "12"=ASY12LMACW Indoor Unit "18"=ASY18LMA-W

# Specifications *for Inverter Model*

## Indoor Unit

| Model No | | | ASY7LMACW | ASY9LMACW | ASY12LMACW | ASY18LMA-W |
|---|---|---|---|---|---|---|
| Capacity | Cooling | kW | 2.2 | 2.7 | 3.5 | 5.2 |
| | | BTU | 7,500 | 9,200 | 12,000 | 17,800 |
| | Heating | kW | 2,6 | 3.3 | 4.1 | 5.8 |
| | | BTU | 8,500 | 11,300 | 14,000 | 19,800 |
| Noise Level | High | dB (A) | 33 | 37 | 40 | 42 |
| | Med | dB (A) | 31 | 35 | 37 | 39 |
| | Low | dB (A) | 29 | 33 | 35 | 36 |
| | Quiet | dB (A) | 27 | 31 | 33 | 32 |
| Dimensions (H x W x D) | | mm | 257 x 808 x 187 | | | 320 x 1,120 x 220 |
| Net Weight | | kg | 8 | | | 16 |
| Air Flow Rate | | $m^3/h$ | 360 | 440 | 480 | 800 |
| Pipe Connections | Type | | Flare | | | |
| | Liquid Side | | ϕ6.35 | ϕ6.35 | ϕ6.35 | ϕ6.35 |
| | Gas Side | | ϕ9.52 | ϕ9.52 | ϕ9,52 | ϕ12.7 |

## Outdoor Unit

| Model No | | | AOY24LMAM2 | |
|---|---|---|---|---|
| Number of Indoor Units | | | 2 | |
| Combined I.U / O.U. Total Capacity | | kW (BTU) | 4.0-9.0 (14,000-30,000BTU) | |
| Operating Mode | | | Cooling | Heating |
| Power Supply | | | 230V 50Hz | |
| Rated | Capacity | kW | 5.8 | 6.4 |
| | | BTU | 19,800 | 21,900 |
| | Running Current | A | 7.3 | 7.1 |
| | Power Input | kW | 1.66 | 1.61 |
| | Power Factor | % | 99 | 99 |
| | COP | | 3.49 | 3.98 |
| Capacity Range | | kW | 2.2-7.9 | 2.6-8.8 |
| Running Current | | A | 3.8-12.3 | 4.8-12.3 |
| Power Input Range | | kW | 0.86-2.80 | 1.08-2.82 |
| Starting Current | | A | 10 | |
| Noise Level | | dB (A) | 49 | |
| Dimensions (H x W x D) | | mm | 650 x 830 x 350 | |
| Net Weight | | kg | 56 | |
| Compressor | Type | | Twin Rotary Type with DC-inverter | |
| | Motor Output | kW | 1.3 | |
| Piping Connections | Type | | Flare | |
| | Unit A | | ϕ6.35 / ϕ9.52 or ϕ12.7 | |
| | Unit B | | ϕ6.35 / ϕ9.52 or ϕ12.7 | |
| Maximum Pipe Length | Each Unit | m | 25 | |
| | Total | m | 30 | |
| Maximum Pipe Height Different | | m | 10 | |
| Refrigerant | | | R410A 1,900g | |
| Wiring Connection | Power Supply | | 2 Wires + Earth | |
| | Indoor to Outdoor | | 3 Wires + Earth | |
| Operating Temperature Outdoor | | ℃ | 0 to 43 (Cooling) / -10 to 21 (Heating) | |

I.U.=Indoor Unit O.U.=Outdoor Unit

ISO 9001 Certified number:09 100 79269 ISO 14001 Certified number:104692
Fujitsu General (Shanghai) Co., Ltd.

ISO 9001 Certified number:09 100 89394 ISO 14001 Certified number:09 104 9245
Fujitsu General (Thailand) Co., Ltd.

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