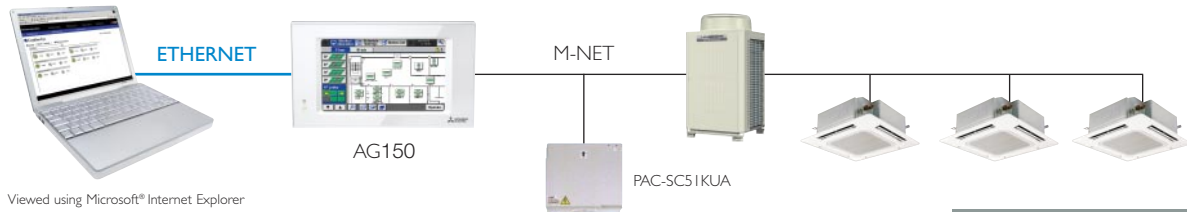


# AG150 Controller

## Touch Screen Centralised Controller with WebServer Capabilities

The new AG150 Mitsubishi Electric centralised controller offers a large 9 inch touch screen display with easy control of up to 50 indoor units. The AG150 can calculate the energy used for each system, zone or indoor unit. The refrigerant status check function can be activated regularly (in conjunction with the new YHM-A City Multi range) and an Internet connection with SSL security is also available to monitor and control the AG150 remotely and receive Email under fault conditions.



Technical Information

AG150 Controller	
FUNCTION	DESCRIPTION
TOUCH SCREEN	Wide high resolution 9" touch screen
OPERATION PLATFORM	Pentium III, CPU 1000 Mhz, 256 MB RAM, 6GB or more. Internal LAN 10/100 MBps running Windows Professional 2000 service pack 4 or Windows Professional XP service pack 2 or Windows Vista
MAX No. OF INDOOR UNITS	Up to 50 indoor units can be connected
ON/OFF	Run and Stop operation for a single group
MODE SELECTION	Switches between Cool/Dry/Auto/Fan/Heat. Operation Mode will vary depending on the indoor unit. Auto mode is available with only R2 and WR2 systems
TEMPERATURE SETTING	Sets the groups temperature control. Cool/Dry: 19-30°C, Heat: 17-28°C, Auto: 19-28°C
FAN SPEED SETTING	4 speed: Lo-Mi1-Mi2-Hi, 2 speed: Lo-Hi
AIR FLOW DIRECTION	Air Flow angles: 100°-80°-60°-40° and auto swing
TIMER OPERATION	Annual or weekly. Night set back option available allowing the setpoint to be set to 12°C
PERMIT/PROHIBIT FUNCTION	Individual prohibit operations for each remote controller function (Run/Stop, Temperature Setting, Mode Selection and Filter Reset) can be activated
INDOOR RETURN AIR TEMPERATURE	Displays the measured intake temperature from each group
ERROR INDICATION	Displays a 4 digit code and the affected unit address. An error log is held showing the last 64 date stamped alarms
TEST RUN FUNCTION	Allows each unit within the group to operate in test mode
VENTILATION INTERLOCK	Allows the group to be interlocked with a heat recovery Lossnay unit
WEB SETPOINT LIMIT	Reduce the setpoint band of each individual unit (e.g. 23°C to 25°C)
WEB AUTO CHANGEOVER	Automatically switch heat pump outdoor unit to cooling or heating mode depending on the requirements
WEB INITIAL SETTING	Commission the AG150 from the web pages
WEB LOGIN	Administrator able to allow specific function access to guest
WEB REFRIGERANT STATUS CHECK	Activate refrigerant volume checking function on Modular City Multi systems
ENERGY CHARGING	Able to create bills for individual indoor units, groups of indoor units or a complete system (Optional) via the PAC-YG60MCA
ENERGY SAVE CONTROL	Individual indoor unit, group of indoor units or a complete system can be controlled. There are various energy saving options available (Optional)
LOAD SHEDDING	Activate energy saving mode when energy consumption is too high
EXTERNAL INPUT/OUTPUT	Hardwired connections are available for : Inputs: Level Signal-Batch Start/Stop, Batch Emergency Stop Outputs: Start/Stop Status, Error/Normal Status
POWER SUPPLY	Power supply 240VAC 0.5A (PAC-SC51KUA required)
COMPATIBILITY	City Multi or Mr Slim via PAC-SF81MA or M Series via MAC-3991F
DIMENSIONS - mm (WxDxH)	300x62x175
OPTIMISED START	The equipment is started only as early as required to bring the building to a setpoint at the time it will be occupied. Running in an optimal state helps reduce energy usage. PAC-YG63MCA and a PT100 sensor required (PT100 sensor not supplied by MEUK)
AUTOMATIC SETPOINT ADJUSTMENT	The AG150 will change the setpoint depending of the outdoor temperature. PAC-YG63MCA and a PT100 sensor are required (PT100 sensor not supplied by MEUK). This function is only available in COOL mode
AUTO LOCK	The AG150 screen can be password protected. When the screen goes to standby and when the AG150 restarts, a username and password will be required
NIGHT SET BACK	During unoccupied hours the system works in a reduced state. For instance, an unoccupied room in heating mode will keep the temperature of the room between 16 and 19°C. In cooling the temperature will range between 24 and 26°C
AutoCAD DRAWING	A floor plan of the building in auto-cad format can be uploaded. For the facilities department it makes viewing and adjusting settings easier

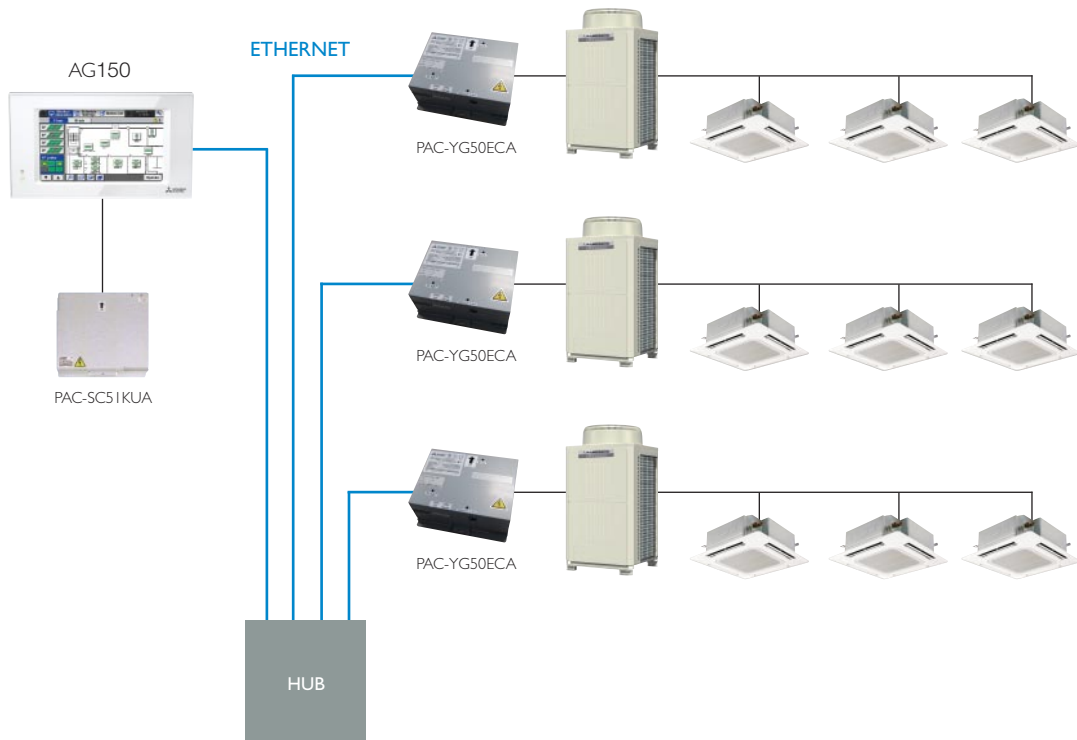
AG150 Software Options - Pin Code Activation			
AG150 - Basic	Web monitoring, Email, Annual scheduling	AG150 - VRC	Virtual remote controllers
AG150 - Energy	Energy monitoring, energy saving, load shedding		

**DEMONSTRATION**  
 Visit [www.L1.mitsubishielectric.co.jp/wink\\_doc/wink\\_files/acr/menu/ag150](http://www.L1.mitsubishielectric.co.jp/wink_doc/wink_files/acr/menu/ag150)

# PAC-YG50ECA

## AG150 Expansion Controller

The new PAC-YG50ECA expansion controller allows the AG150 to monitor and control up to 150 indoors units.



Technical Information

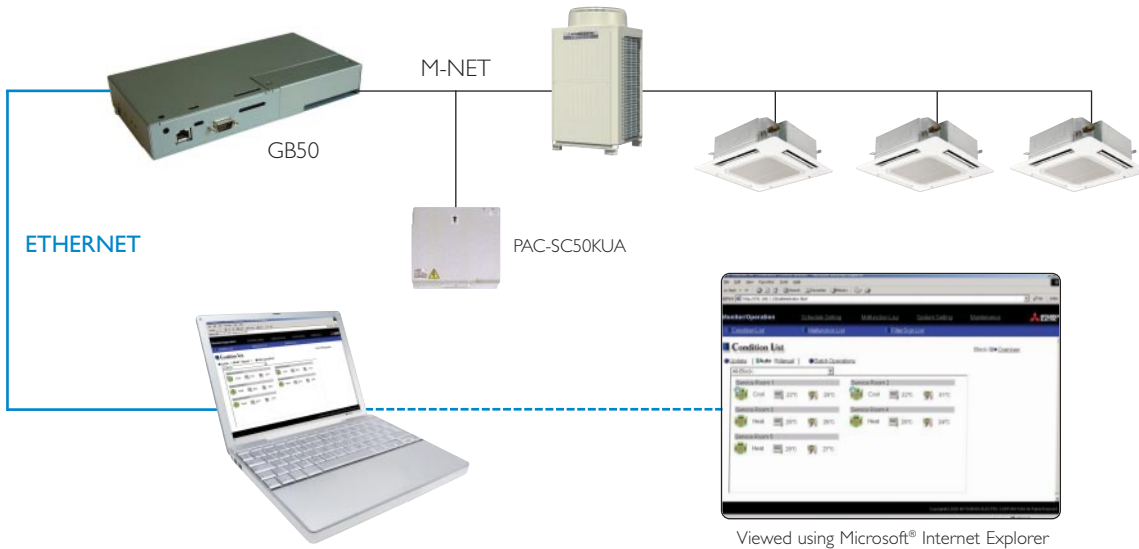
PAC-YG50ECA		
NUMBER OF INDOOR UNITS	NUMBER OF AG150 REQUIRED	NUMBER OF PAC-YG50ECA REQUIRED
0 to 50	1	0
51 to 100	1	2
101 to 150	1	3

PAC-YG50ECA	
FUNCTION	DESCRIPTION
AG150 / PAC-YG50ECA CONNECTION	Ethernet. Ethernet hub and network cables required and not supplied by MEUK
POWER SUPPLY	240VAC 3.2A
DIMENSIONS - mm (WxDxH)	250x97x217

# GB50 Controller

## Centralised Controller with WebServer Capabilities

The GB50 has been developed to access all your control functions from the comfort of your own PC, without the need for a controller keypad or LCD display and at a very competitive price.



Technical Information

GB50 Controller	
FUNCTION	DESCRIPTION
OPERATION PLATFORM	Pentium III, CPU 1000 Mhz, 256 MB RAM, 6GB or more. Internal LAN 10/100 MBps running Windows Professional 2000 service pack 4 or Windows Professional XP service pack 2 or Windows Vista
MAX No. OF INDOOR UNITS	Up to 50 indoor units can be connected
ON/OFF	Run and Stop operation for a single group
MODE SELECTION	Switches between Cool/Dry/Auto/Fan/Heat. Operation Mode will vary depending on the indoor unit. Auto mode is available with only R2 and WR2 systems
TEMPERATURE SETTING	Sets the groups temperature control. Cool/Dry: 19-30°C, Heat: 17-28°C, Auto: 19-28°C
FAN SPEED SETTING	4 speed: Lo-Mi1-Mi2-Hi, 2 speed: Lo-Hi
AIR FLOW DIRECTION	Air Flow angles: 100°-80°-60°-40° and auto swing
TIMER OPERATION	Annual or weekly. Night set back option available allowing the setpoint to be set down to 12°C
PERMIT/PROHIBIT FUNCTION	Individual prohibit operations for each remote controller function (Run/Stop, Temperature Setting, Mode Selection and Filter Reset) can be activated
INDOOR RETURN AIR TEMPERATURE	Displays the measured intake temperature from each group
ERROR INDICATION	Displays a 4 digit code and the affected unit address. An error log is held showing the last 64 date stamped alarms
TEST RUN FUNCTION	Allows each unit within the group to operate in test mode
VENTILATION INTERLOCK	Allows the group to be interlocked with a heat recovery Lossnay unit
WEB SETPOINT LIMIT	Reduce the setpoint band of each individual unit (e.g. 23°C to 25°C)
WEB AUTO CHANGEOVER	Automatically switch heat pump outdoor unit to cooling or heating mode depending on the requirements
WEB INITIAL SETTING	Commission the GB50 from the web pages
WEB LOGIN	Administrator able to allow specific function access to guest
EXTERNAL INPUT/OUTPUT	Hardwired connections are available for : Inputs: Level Signal-Batch Start/Stop, Batch Emergency Stop Outputs: Start/Stop Status, Error/Normal Status
POWER SUPPLY	Power supply 240VAC 0.2A (PAC-SC50KUA recommended)
COMPATIBILITY	City Multi or Mr Slim via PAC-SF81MA or M Series via MAC-399IF
DIMENSIONS - mm (WxDxH)	250x38x130

GB50 Software Options - Pin Code Activation	
G50 - EC	Energy Charge
G50 - ES	Energy Saving Capability
G50 - PC	Peak Cut Control
G50 - VR	Virtual Remote Controllers

# AG150/GB50 Controller Web Screenshots

## Login



Access to the web pages is secured using a customised username and password.

## Monitor Air Conditioning - Overview



The first screen allows you to monitor all the units connected to the AG150/GB50. Each icon displays On/Off, Faults and timer On/Off.

## Monitor Air Conditioning - Block view



Each area of the building can be displayed with information about On/Off, Setpoint, Mode and Temperature.

## Remote Controller Settings



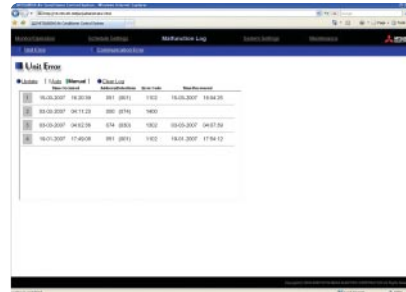
Click on any icons in the Monitor View page to access the remote controller. Lossnay units can also be controlled. Buttons on the local controllers may be locked (On/Off, Mode, Setpoint, Filter Reset).

## Daily, Weekly and Annual Scheduling (AS PIN code)



Scheduling may be set from the web pages. A night set back operation is available (Heat, 12°C). Standard on the AG150/GB50.

## Monitor Fault Codes



Faults with the unit address can be displayed under fault conditions. Email status can also be shown.

## Multiple Users (VRC PIN code)



If the AG150/GB50 is connected to an office LAN, the staff will then be able to access the web pages. With VRC each member of staff will have their own username and password.

## Multiple Users (VRC PIN code)



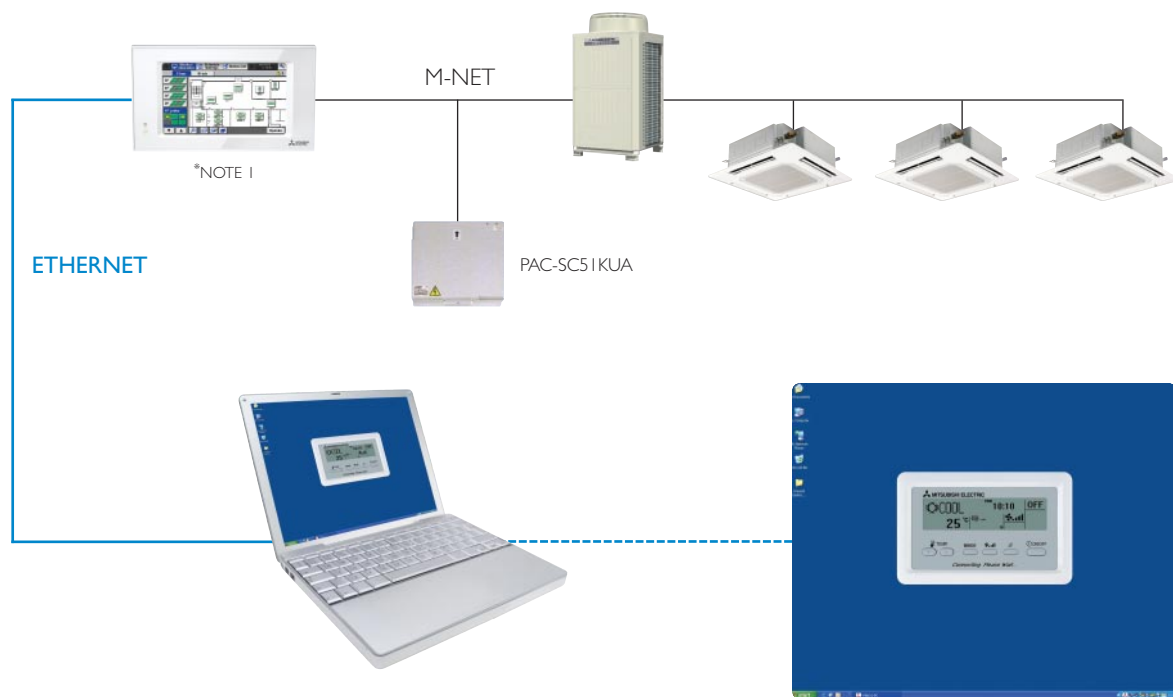
Installation costs will be reduced as no wall remote controllers will need to be purchased and installed.

New icons now available to suit model type installed.



# AG150/GB50 Desktop Remote Controller

More and more customers are using the AG150/GB50 controllers directly from their computers, so Mitsubishi Electric has launched a new, even simpler alternative which presents the customer with what looks like a standard remote controller interface - on their PC desktop. Called the PAR-2IPC, the new application can also be minimised in the Desktop Toolbar, just like other Windows applications, so that the customer can have immediate control with just one click of the mouse.



## Technical Information

PAR-2IPC Desktop Remote Controller	
FUNCTION	DESCRIPTION
OPERATION PLATFORM	Pentium III, CPU 1000 Mhz, 256 MB RAM, 6GB or more. Internal LAN 10/100 MBps running Windows Professional 2000 service pack 4 or Windows Professional XP service pack 2 or Windows Vista
MAX No. OF INDOOR UNITS	Up to 16 indoor units within a group
ON/OFF	Run and Stop operation for a single group
MODE SELECTION	Switches between Cool/Dry/Auto/Fan/Heat. Operation Mode will vary depending on the indoor unit. Auto mode is available with only R2 and WR2 systems
TEMPERATURE SETTING	Sets the groups temperature control. Cool/Dry: 19-30°C, Heat: 17-28°C, Auto: 19-28°C
FAN SPEED SETTING	4 speed: Lo-Mi1-Mi2-Hi, 2 speed: Lo-Hi
AIR FLOW DIRECTION	Air Flow angles: 100°-80°-60°-40° and auto swing
CLOCK DISPLAY	Displays the time on the desktop controller
INDOOR RETURN AIR TEMPERATURE	Displays the measured intake temperature from each group
ERROR INDICATION	Displays a 4 digit code and the affected unit address.
TIMER OPERATION	Weekly. Maximum of 3 time sequences with 3 Start/Stop times per day for all groups can be allocated

\*NOTE 1: Applicable with AG150 / PAC-SC51KUA or GB50 / PAC-SC50KUA