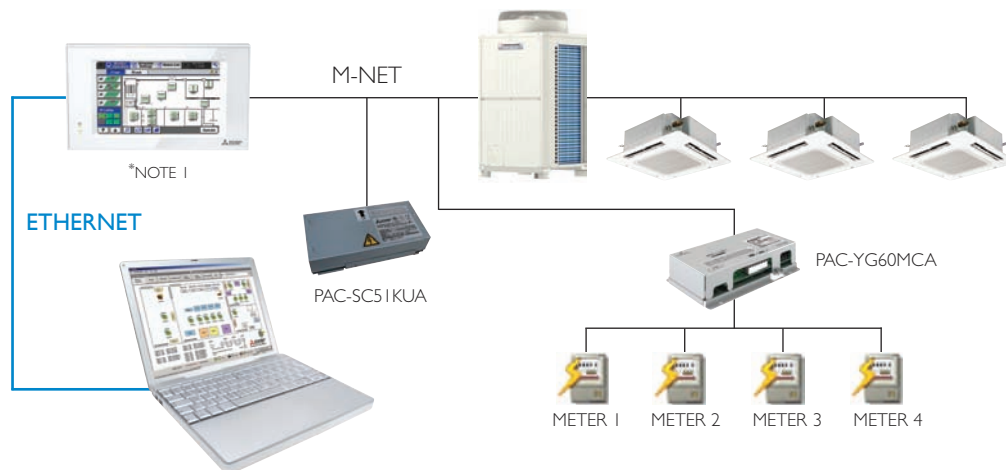


# TG2000 Software with Energy Monitoring

## PC Based Software Package

The TG2000 centralised PC based graphical software package allows the operator to control and monitor up to a maximum of 2000 indoor units. This software has been designed to connect directly to an air conditioning system via the AG150/GB50 controller, allowing the operator all the required functionality to control and monitor the complete air conditioning system from a central location. In addition to providing a centralised control facility, the TG2000 allows complete energy consumption data to be logged with user definable billing groups and electrical tariffs for billing purposes.



Technical Information

### TG2000 Software with Energy Monitoring

FUNCTION	DESCRIPTION
OPERATING PLATFORM	CPU 1000 Mhz, 512 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 or Windows 7
MAX No. OF INDOOR UNITS	2000 Indoor units, 50 indoor units per AG150/GB50
OPERATIONAL SECTIONS	The software package is split into two distinctive areas, System and Controls setting. System Setting: Password protected, System Configuration and group/block organisation, printer setting. Controls Setting: Normal Operation, monitoring and control functions as described below. The software allows individual indoor units to be allocated to logical groups, represented within user definable graphics screens, allocated during the system configuration
ON/OFF	Indicates the On/Off status of each group within the selected graphical screen or entire building
OPERATION MODE	Indicates the operational mode (Cool, Heat, Fan, Dry, Auto) for each group on the selected graphical screen
SET TEMPERATURE	Displays the set temperature for each group on the selected graphical screen. Also able to limit the set point range in both heating and cooling mode
AIR SPEED	Displays the current fan speed setting for each group on the selected graphical screen
REMOTE CONTROLLER PROHIBIT/PERMIT	Displays the current prohibit/permit status for each groups remote controller on the selected graphical screen
ABNORMALITY (FAULT) MONITORING	Individual indoor unit fault monitoring is recorded within the fault log for both viewing and printing. Fault monitoring can also be viewed via the fault log for all units associated with a particular graphical screen or the entire building. Faults can also be tracked and printed using date of failure, date of recovery and error code
ROOM TEMPERATURE MONITORING	Displays the return air temperature of the master indoor unit within a group
SCHEDULED ON/OFF	On/Off schedules can be set for each group, each graphical screen or the entire building
ENERGY CHARGING	Able to create or email bills for individual indoor units, groups of indoor units or a complete system (Optional) via the PAC-YG60MCA
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
TREND LOGGING	Able to log: Return air temperature, setpoint, mode, On/Off, power consumption by group or by indoor unit, watt-hour meter and then email to customer
GRAPHICAL SCREENS	The complete system configurations can be allocated between multiple screens. Each screen can display a bitmap image representing the area of the building or floor where the units or groups are physically located
EMAIL	The following information may be sent regularly and automatically via email: energy monitoring data, energy saving data, trend logging data (temperatures etc) and fault code history

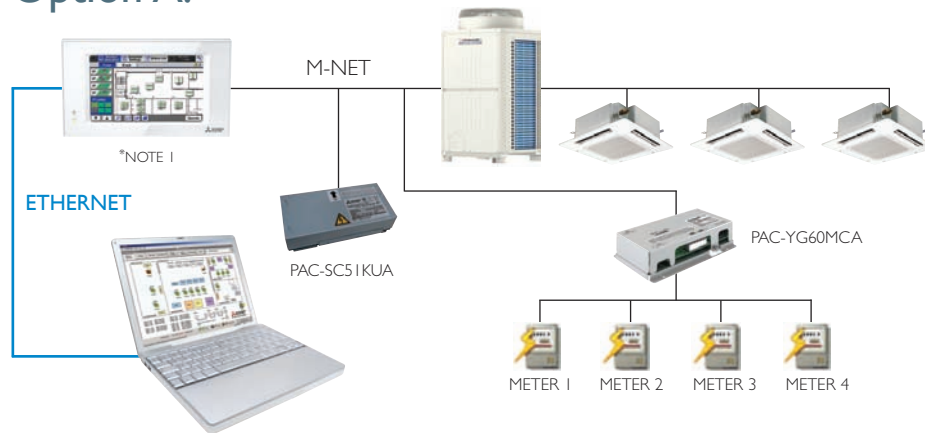
\*NOTE 1: Applicable with AG150 / PAC-SC51KUA or GB50  
 NOTE 2: Energy Meters not supplied by MEUK

# Energy Monitoring

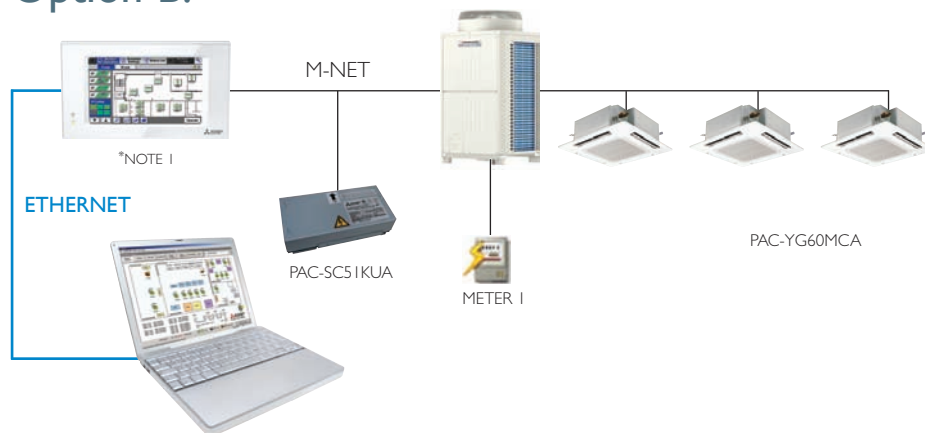
Energy monitoring is key to comply with Part L2 regulations. Some time ago we introduced the PAC-YG60MCA MNET interfaces, which can be connected anywhere on our MNET network and will monitor up to 4 pulse meters. These interfaces make installation easier, more cost effective and are shown in option A below.

This year, all of our City Multi outdoor units now have a direct connection to pulse meters. This means that the pulse meter can be connected to the outdoor unit directly, negating the need for interfaces, panels and a power supply and therefore reducing the installation cost significantly. This is shown in option B below.

## Option A:



## Option B:



Technical Information

### Pulse Meter Direct Connection to City Multi Outdoor Unit

FUNCTION	PRODUCT REQUIRED	DESCRIPTION
OUTDOOR kW	AG150, AG150-Basic Energy Meters	The energy consumption of the outdoor can be monitored using the AG150 Webpages
INDOOR kW	AG150, AG150-Basic AG150-Energy, TG2000 Energy Meters	The energy consumption of the indoor unit can be estimated using the TG2000 software package. The software package will also allow the end user to generate bills with multiple tariffs

### Product Required

PAC-SA89TA	Cable required to connect the pulse meter to the outdoor unit
PAC-CN32WHMC-UK	Jumper to activate the outdoor pulse input