

# Meter Management Unit



- **Meter ready to install - no cut-outs or special mounting facilities required**
- **Case can be rotated for test sockets to left or right side**
- **No need for separate meter fusing**
- **Saves installation time and costs**
- **Easy Meter Servicing**
- **Easy to connect a power analyser for accuracy and wiring verification**

It is essential that electricity meters are connected to a fused voltage supply. If a suitable fused voltage supply has not already been provided within the panel, the easiest way to install a meter is to use a Meter Management Unit or **MMU** which has the meter, meter fuses and a neutral-disconnect link mounted in a single enclosure. The MMU can then be wired directly to the busbars (NB. long unprotected cable runs should be avoided).

SHM Offers Carlo Gavazzi DIN series meters mounted in a sealable rugged MMU enclosure. The MMU can be mounted on a wall, or panel surface or top.

All connections are to DIN-rail terminal blocks inside the unit. Wiring access is via conduit knock outs.

MMU's are available for either single-phase or 3-phase meters

A wide unit (MMU2) has space for an additional 6-DIN unit, typically a second meter on same voltages

# Guidelines for Energy Meter use in New Non-Domestic Buildings

Please find below extracts from the new L2 Building Regulations to help you to understand why and where Energy Meter use is now required. The accuracy class required for the meters stipulated below is EN61036 energy class 1.

## Why use Energy Meters ?

“To enable owners or occupiers to measure their actual energy consumption, the building engineering services should be provided with sufficient energy meters and sub-meters. The owners or occupiers should also be provided with sufficient instruction, including an overall metering strategy, that show how to attribute energy consumptions to end users and how the meter readings can be used to compare operating performance with published benchmarks”

Carlo Gavazzi can offer a range of kWh meters such as the WM2-DIN and WM2-96 to measure actual energy consumption.

## When do I need to use an Energy Meter ?

“Reasonable provision of meters would be to install incoming meters in every building greater than 500m<sup>2</sup> gross floor area (including separate buildings on multi-building sites) this would include individual meters to directly measure the total electricity, gas, oil and LPG consumed within the building”

This means metering in all buildings with a floor area greater than 500m<sup>2</sup>, this can be done either with individual energy meters, (as above) or by our range of universal utility meters the EM3-DIN and WM24-96, which register the pulse outputs from Water and Gas meters in addition to the Electricity measurement.

# Guidelines for Energy Meter use in New Non-Domestic Buildings - PLANT

## What size of plant requires separate Energy Metering?

b) Energy consumed by plant items with input powers greater or equal to that shown in table 13.

Table 13 Size of Plant for which separate metering would be reasonable	
Plant item	rated input power (kW)
Boiler installation comprising one or more boilers or CHP plant feeding a common distribution circuit.	50
Chiller installations comprising one or more chiller units feeding a common distribution circuit	20
Electric Humidifiers	10
Motor control centres providing power to fans and pumps	10
Final electrical distribution boards	50

d) Any process load (see paragraph 1.60d) that is to be discounted from the buildings energy consumption when comparing measured consumption against published benchmarks.

1.60d: process requirements; in office buildings process requirements can be taken to include any significant area in which an activity takes place which is not typical of the office sector, and where the resulting need for heating, ventilation or air conditioning is significantly different to that of ordinary commercial offices. When assessing the performance of air conditioning or mechanical ventilation system areas which are treated (because of process requirements) should be excluded from the treated area, together with the plant capacity, that is provided to service those areas, Activities and area in office buildings considered to represent process requirements include:

- Staff restaurants and kitchens
- Sports facilities
- large, dedicated, conference rooms
- Dedicated computer or communications rooms.

For more information on this subject please refer to the government website [www.energyefficiency.gov.uk](http://www.energyefficiency.gov.uk)

This information was taken from the **General information leaflet 65** available in PDF format from the government website.

ITEM DESCRIPTION	Part No
Meter Management Unit, 3-phase, supplies external meter, 3-phase and neutral fused voltage disconnect links	MMU0
Meter Management Unit, 1-phase, supplies external meter, live and neutral fused voltage disconnect links	MMU0S
Meter Management Unit, 3-phase, meter pre-wired, 3-phase and neutral fused voltage disconnect links	MMU1
Meter Management Unit, 1-phase, meter pre-wired, live and neutral fused voltage disconnect links	MMU1S
Meter Management Unit, 3-phase, meter pre-wired, 3-phase and neutral fused voltage disconnect links, with space for additional module	MMU2
Meter Management Unit, 1-phase, meter pre-wired, live and neutral fused voltage disconnect links, with space for additional module	MMU2S
Test socket option for MMU0, L1/L2/L3/N protected voltage test sockets for retractable shroud 4mm test plugs	- V
Test socket option for MMU1 & MMU2, colour-coded external L1/L2/L3/N cap-protected voltage test sockets for 4mmshrouded test plugs	- P
Current terminal option, CT connection and shorting terminals for MMU0, MMU1, MMU2	- T