

EDMI Mk 7C

Electricity Meter



Atlas Series Class 1 and Class 2

Designed for commercial and industrial sites, the Mk7C can operate in credit or prepayment modes, with a relay for remote connect-disconnect of electrical services.

User Guide to LCD Screen Displays



Version 1.1

Bringing **meters** to life...

EDMI Mk 7C Electricity Meter



1.0 INTRODUCTION

The EDM I Mk 7C meter is a new development of 'Smart' metering used to measure Electricity consumption. It is a unique product which enables energy usage to be continually measured and stored and then data is transmitted to the electricity supply company when needed for billing.

The meter has a large number of features, readily available, to provide Users with detailed information about their electricity supply including; Date, Time, Tariff (Standard Settlement Configuration - SSC), Total Billing Energy Consumption together with individual Rate consumptions for consumers on multi rate tariffs. In addition, Power Factor, Maximum Demand and billing reset information is available for Users who need this additional information.

There is an option to obtain analysed billing data information via a web link so that Users can see a detailed breakdown of their energy usage and time of use to enable any unplanned wastage to be eliminated and help manage more efficient usage, as part of an energy management process.

2.0 ACCESS TO DISPLAY SCREENS

Access to all the features of the meter only requires the pushing of a single 'select' button on the meter. The meter has two main displays called 'Set A' and 'Set B'.

Set A contains the main User displays whilst **Set B** contains test/supplementary information.

To move from 'Set A' to 'Set B' you simply press and hold the 'display' button for approximately 2 seconds.

- The meter itself is normally set to automatically cycle through the 'Set A' LCD displays to show individual items approximately every 10 seconds.
- You can force it to go to the display item you want within the 'Set' by simply pressing the 'select' button once and the display will advance one step. Continual individual presses of the button will eventually cycle the display back to your starting point.

Details of all the individual LCD screens within each 'Set' are shown on the following pages.

3.0 THE SCREEN WITH ALL SEGMENTS ILLUMINATED

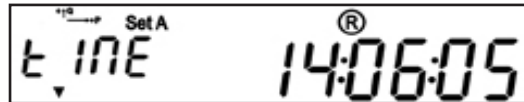
<ol style="list-style-type: none"> 1 INDICATES POWER FLOW +P = Import Kw - P = Export Kw +Q = Import kVar (Lag) - Q = Export kVar (Lead) 2 REGISTERS DISPLAYS Set A (Main) Set B (Test) 3 LOW BATTERY 4 LOCAL COMMS IN USE (Flag Probe) 5 REMOTE COMMS IN USE (eg Modem) 6 UNITS BEING MEASURED 7 ENUNCIATORS E1 REVERSE POWER ALARM E2 MODEM POWER ON E3 ANY ACTIVE ALARMS E4 LATCHED ALARMS E5 NOT IN USE 8 ABSOLUTE Wh 9 ABSOLUTE VARh 	<p>The diagram shows the meter's LCD display with the following callouts:</p> <ul style="list-style-type: none"> 1: Power flow indicator (+P, -P, +Q, -Q) 2: Set A and Set B labels 3: Battery level indicator 4: Local comms indicator (L) 5: Remote comms indicator (R) 6: Units being measured (£ kWh) 7: Enunciators E1, E2, E3, E4, E5 8: Pulse 1 indicator (Wh) 9: Pulse 1 indicator (VARh)
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3.1 SET A - METER READING INFORMATION

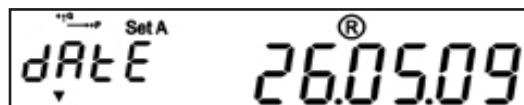
Please note that the display will normally cycle around each item in turn automatically every 10 seconds

Register Identifiers
(for reading purposes)

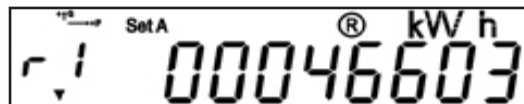
Current Time (GMT)



Current Date
(26th May 2009 Shown)



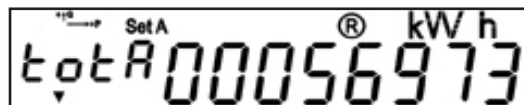
Rate 1
(Meter Reading)



R1
R2

Please note that for multi-tariff meters the meter register will be the only one displayed

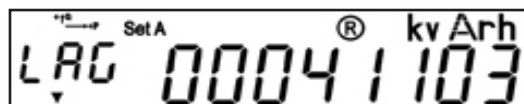
Total kWh
(Meter Reading)



S

Please note that for multi-tariff meters the meter register will be the only one displayed

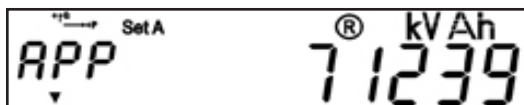
kVArh Lag
(Sine Meter Reading)



KV

Please note that for Users on non MD Tariffs some of the display registers shown are not applicable to your tariff and will therefore not be displayed

kVAh
(Apparent Energy Meter Reading)



KZ

Maximum Demand in kW
(Highest Demand since last reset)



MD

Maximum Demand in kVA
(Highest Demand since last reset)



MZ

Previous MD in kW



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Please note that the display will normally cycle around each item in turn automatically every 10 seconds

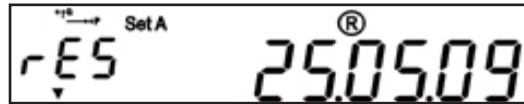
Previous MD in kVA



Billing Reset (Count of Resets)

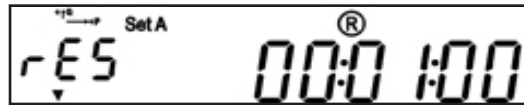


Billing Reset (Date)

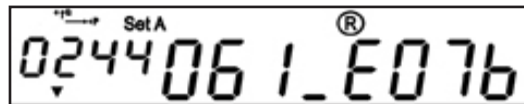


Please note that for multi-tariff meters the meter register will be the only one displayed

Billing Reset (Time)

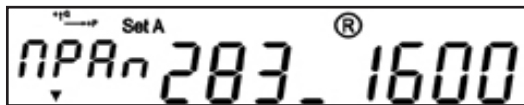


Tariff & Meter Serial Number (eg SCC 0244 & E07BG04061)



Indicates the start of the Meter Serial Number which scrolls across the LCD

MPAN (eg 1600000000283)



Indicates the start of the MPAN which scrolls across the LCD

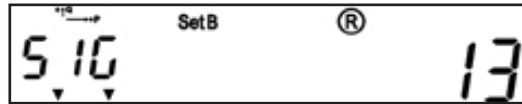
Test Display (All segments illuminated)



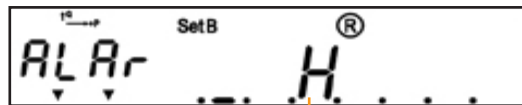
This is the last display in 'SET A' before reverting back to the first display : Current Time

3.2 SET B - TEST/SUPPLEMENTARY INFORMATION

Signal Strength



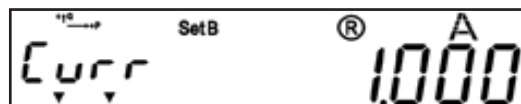
Alarm Status Flags



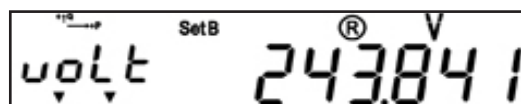
Indicates the start of the Alarm Codes which scroll across the LCD

FLAG LETTERS	ALARM NAME
E	ANALOG REFERENCE FAILURE
V	VOLTAGE TOLERANCE ERROR
C	CLOCK FAILURE
M	REVERSE POWER
L	CALIBRATION DATA LOST
H	MODEM FAILURE
X	RAM FAILURE OR LCD FAILURE
Y	PROGRAM FLASH FAILURE
Z	DATA FLASH FAILURE
N	PULSING OUTPUT OVERFLOW
D	BATTERY FAILURE
U	TAMPER

Current
(Phase Current RMS)



Voltage
(Phase Voltage RMS)



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3.2 SET B - TEST/SUPPLEMENTARY INFORMATION

Power Factor (PF)
(-ve for Lag +ve for Lead)

PF 0.9831

Total Active Power kW
(+P for Import -P for Export)

t_vP 18028 kW

Total Reactive Power kVAr
(+Q for Import -Q for Export)

t_vrP 8.1838 kVAr

Total Apparent Power kVA
(+P for Import -P for Export)

t_vAP 32.971 kVA

Manufactures Serial Number

SEr 120785043

This is the last display in 'SET B'. The meter should automatically to 'SET A' after approximately 45 seconds if no further keys are pressed. Alternatively you can force it back to 'SET A' by pressing the 'SELECT' button for 2 seconds