ENERGY assets

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.

EDMI Mk 7C Electricity Meter

User Guide to LCD Screen Displays

1.0 INTRODUCTION

The EDMI 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

1	INDICATES POWER FLOW
+	P = Import Kw
	- P = Export Kw
+	Q = Import kVar (Lag)
	- Q = Export kVar (Lead)
2	REGISTERS DISPLAYS
S	et A (Main)
S	et 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
E	1 REVERSE POWER ALARM
E	2 MODEM POWER ON
E	3 ANY ACTIVE ALARMS
E	4 LATCHED ALARMS
E	5 NOT IN USE
8	ABSOLUTE Wh
9	ABSOLUTE VArh
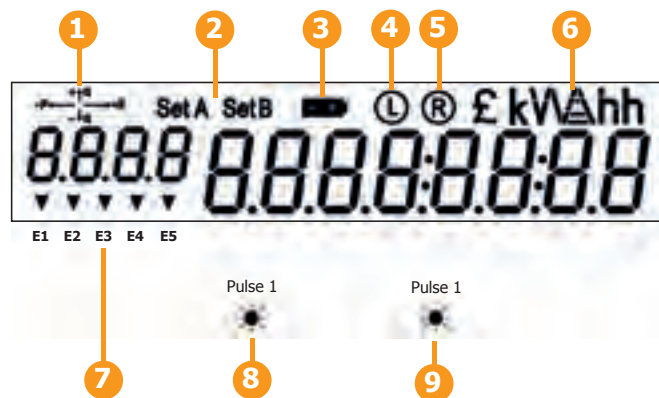
Energy Assets
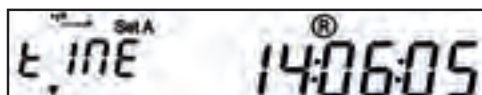
bringing **meters** to life...

3.1 SET A - METER READING INFORMATION

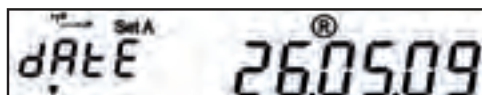Please note that the display will normally cycle around each item in turn automatically every 10 seconds
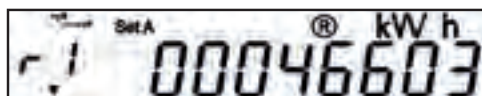
Register Identifiers
(for reading purposes)

Current Time (GMT)

Set A   ®
t InE   14:06:05

Current Date
(26th May 2009 Shown)

Set A   ®
dAtE   26.05.09

Rate 1
(Meter Reading)

Set A   ®   kW h
r.1   00046603

| R1 |
| R2 |

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

Total kWh
(Meter Reading)

Set A   ®   kW h
totA 00056973

| S |

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

kVArh Lag
(Sine Meter Reading)

Set A   ®   kv Arh
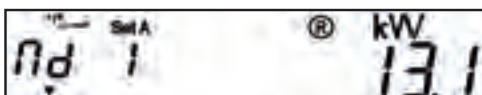LAG 00041103

| 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
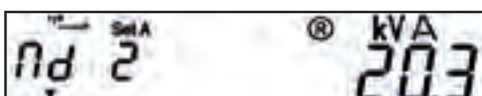
kVAh
(Apparent Energy Meter Reading)

Set A   ®   kV Ah
APP   71239

| KZ |

Maximum Demand in kW
(Highest Demand since last reset)

Set A   ®   kW
Nd 1   13.1

| MD |

Maximum Demand in kVA
(Highest Demand since last reset)

Set A   ®   kVA
Nd 2   20.3

| MZ |

Previous MD in kW
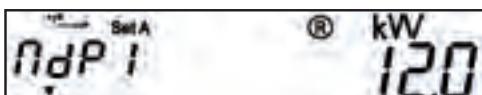
Set A   ®   kW
NdP 1   12.0

3.1 SET A - METER READING INFORMATION

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

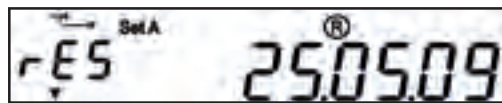**Previous MD in kVA**

NdP2   kVA 14.2

Billing Reset
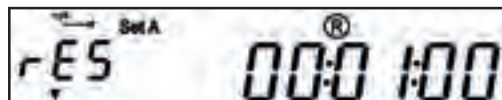(Count of Resets)

rES   21

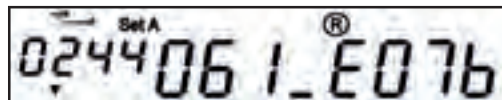**Billing Reset**
(Date)

rES   25.05.09

Please note that for multi-tariff meters the meter register will be the only one displayed
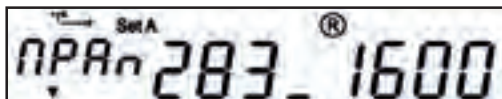
Billing Reset
(Time)

rES   00:01:00

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

0244 061_E07b

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

MPAN
(eg 1600000000283)

nPAn 283_1600

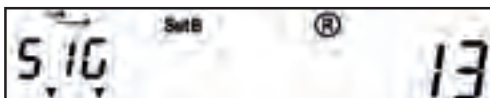Indicates the start of the MPAN which scrolls across the LCD
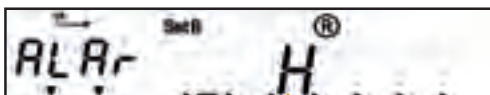
Test Display
(All segments illuminated)

8.8.8.8 8.8.8.8.8.8.8.8

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

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)
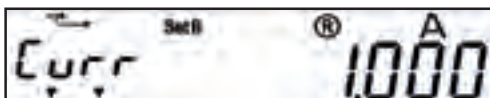
Voltage
(Phase Voltage RMS)
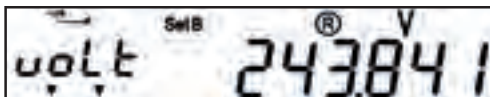
3.2 SET B - TEST/SUPPLEMENTARY INFORMATION

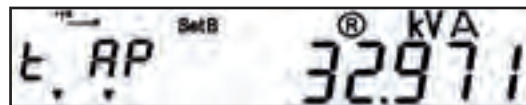### Power Factor (PF)
(-ve for Lag +ve for Lead)

```
PF        SetB      ®
                  0.9831
```

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

```
t.P       SetB      ®    kW
                  1.8028
```
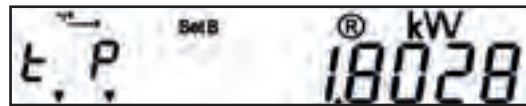
Total Reactive Power kVAr
(+Q for Import -Q for Export)

```
t.rP      SetB      ®    kVAr
                  8.1838
```
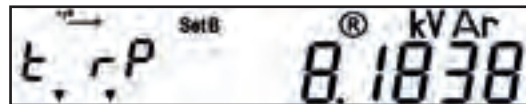
Total Apparent Power kVA
(+P for Import -P for Export)

```
t.RP      SetB      ®    kVA
                  32.971
```

Manufactures Serial Number

```
SEr.      SetB      ®
          120785043
```
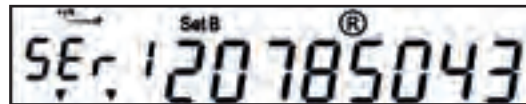
This is the last display in 'SET B'. The meter should automatically to 'SET A' after approximately 45 seconds if no further keys are pressed. Alternatively you can force it back to 'SET A' by pressing the 'SELECT' button for 2 seconds

Energy Assets

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