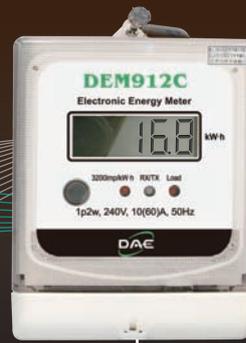


# 840 Series Prepaid Tenant Metering System



ICR840



Smart for Greenlife!

## Features

- The prepaid tenant metering system is well suited for rental units such as apartments and market stalls.
- Simple to use. Insert card to get power, remove card to stop power. Pay only for the energy consumed.
- Tenant pays in advance before using power.
- Easy to manage prepaid system using smart cards as the medium to store credits.
- Tenant can view the remaining credits anytime.
- Use the function key to show the consumed energy (kWh).
- Use the function key to show the tariff rate while the user card is inserted.

## Applications



Power Distribution Panels



Apartments



Rental Offices



Classrooms



Dormitories

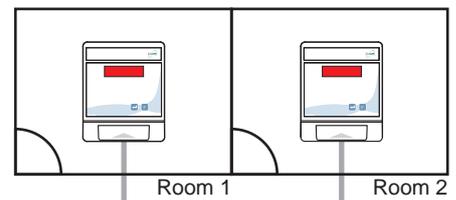


Retail Shops

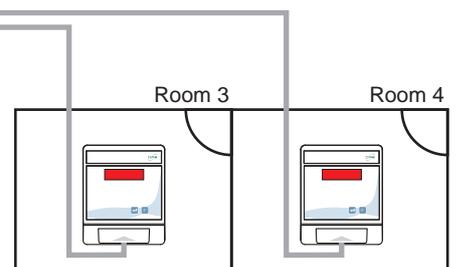
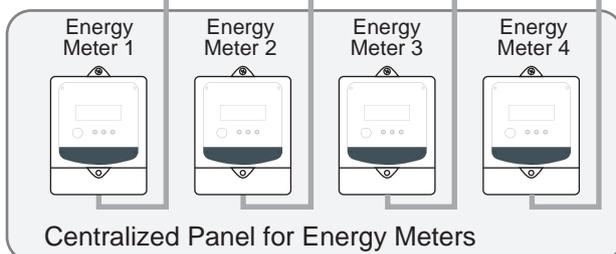
## Architecture

Easy for the electrician to install

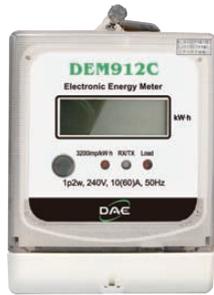
- Installed in the same manner as ordinary kWh meters
- The energy meter and the card reader unit are connected through a 4C flat phone cable; up to a distance of 328 feet (100 meters)



4C flat phone cable  
(26AWG)



## Energy Meter



DEM912C/D913C



DEM934C

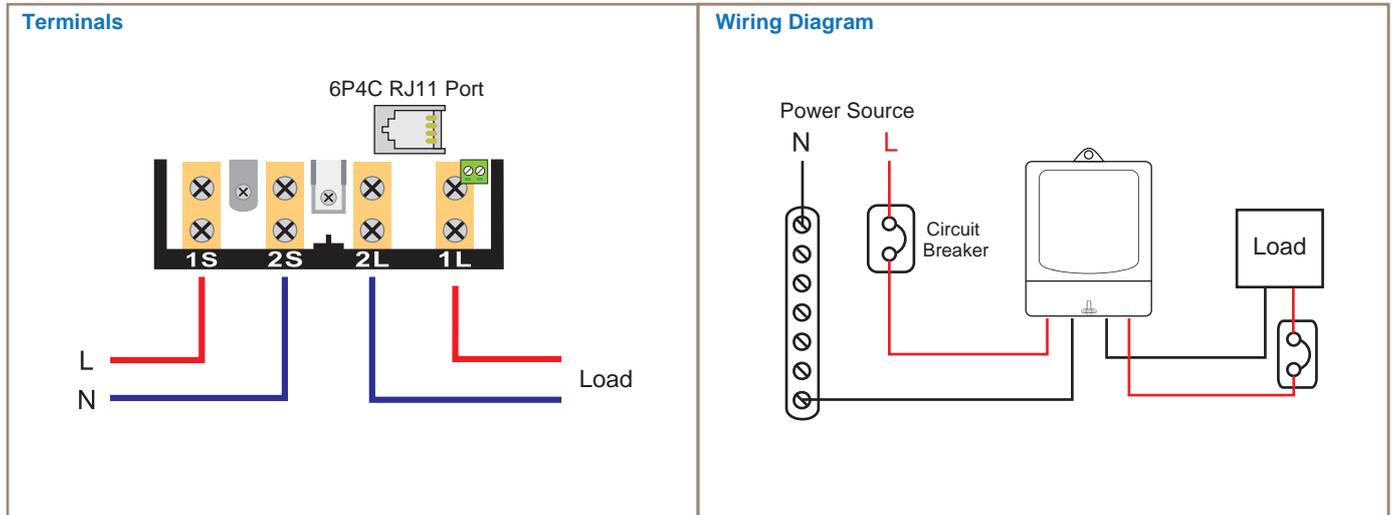
### Specifications

Models	DEM912C-120V-60A	DEM912C-240V-60A	DEM913C-120/208-240V-60A
Phase/Wire	1p2w	1p2w	1p3w
Voltage & Frequency	AC 120V, 50Hz	AC 240V, 50Hz	AC 120/208-240V, 50Hz
Power Consumption	less than 2VA	less than 2VA	less than 2VA
Display	6 digit 7 segment LCD display	6 digit 7 segment LCD display	6 digit 7 segment LCD display
Meter Constant	3200 imp/kWh	3200 imp/kWh	3200 imp/kWh
Max Current	60A	60A	60A
Max Wire Gauge	30mm <sup>2</sup>	30mm <sup>2</sup>	30mm <sup>2</sup>
Weight	615g	615g	615g
Models	DEM934C-240/416V-80A	DEM934C-240/416V-10A	
Phase/Wire	3p4w	3p4w	
Voltage & Frequency	AC 240/416V, 50Hz	AC 240/416V, 50Hz	
Power Consumption	less than 5VA	less than 5VA	
Display	6 digit 7 segment LED display	6 digit 7 segment LED display	
Meter Constant	3200 imp/kWh	6400 imp/kWh	
Max Current	80A	10A, use with regular 5A output CTs	
Max Wire Gauge	30mm <sup>2</sup>	5mm <sup>2</sup>	
Weight	1500g	1500g	

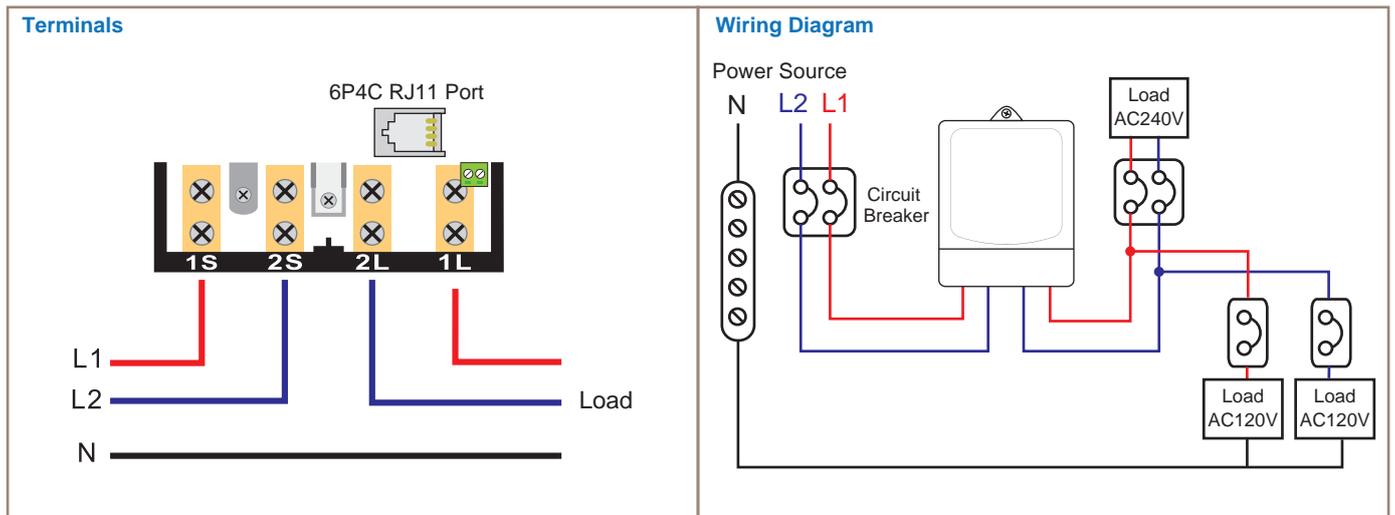
### Common Specifications

Item	Description
Card Reader Interface	One 6P4C RJ11 Port, for ICR card reader
Indicator LEDs	<ul style="list-style-type: none"> <li>• Meter Constant</li> <li>• Communication Activity</li> <li>• Load Status</li> </ul>
Environment	Operating: Temperature 0~60°C (32~140°F), Humidity ≤ 90% RH Storage: Temperature -10~80°C (14~176°F), Humidity ≤ 90% RH
Production Standard	IEC61036
Mounting	Can either be mounted inside panel or wall mounted

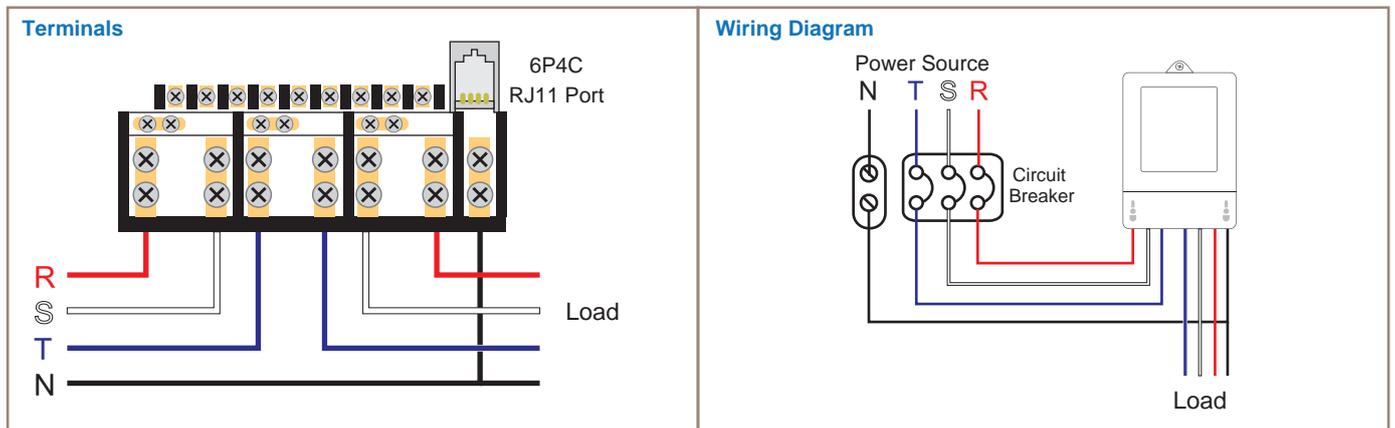
### DEM912C Wiring



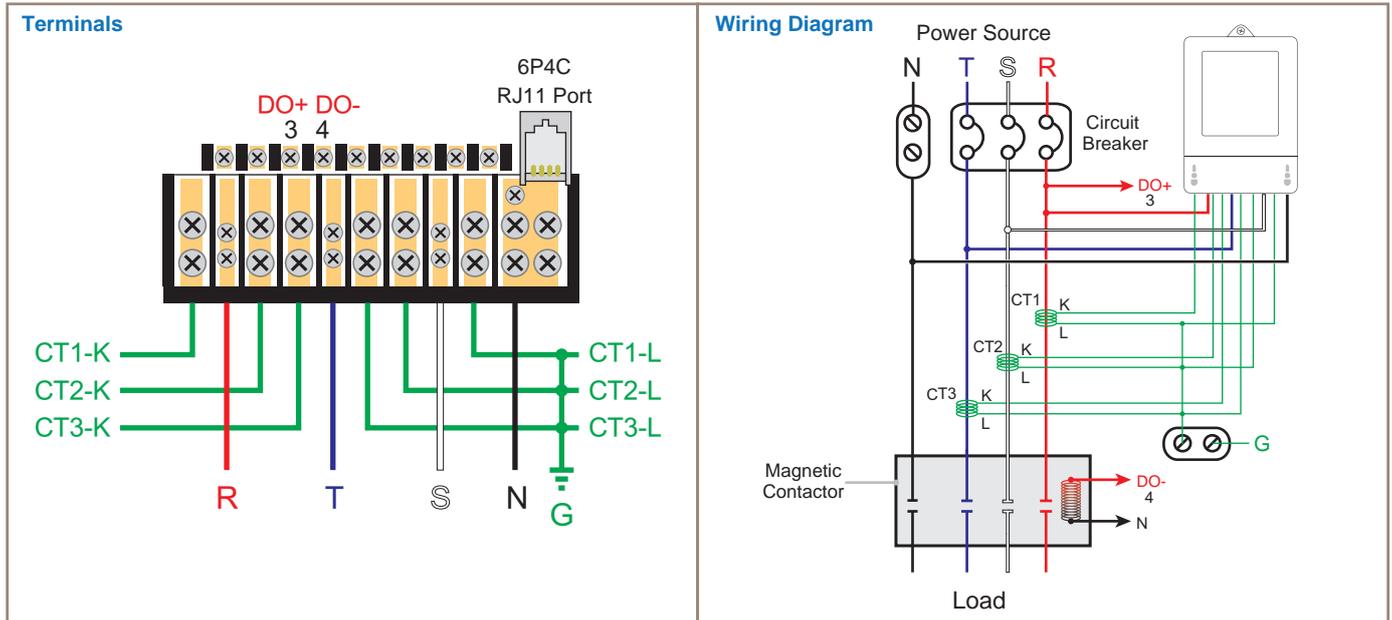
### DEM913C Wiring



### DEM934C-240/416V-80A Wiring

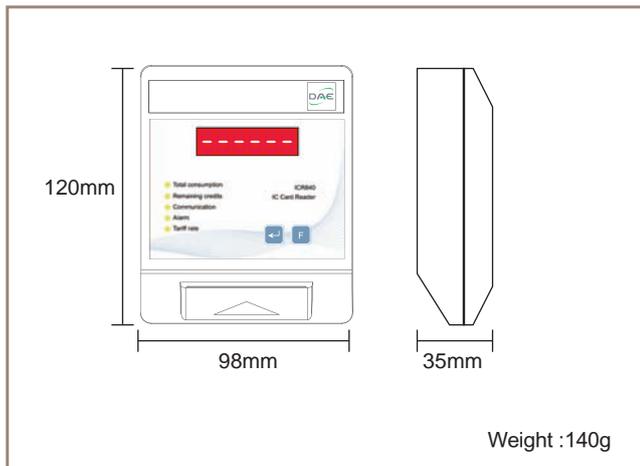


**DEM934C-240/416V-10A Wiring ( use with regular 5A output CTs )**

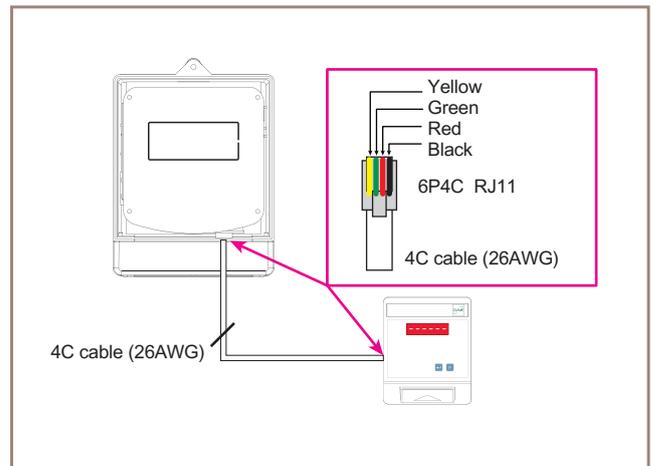


**ICR840 Card Reader**

**Dimensions**



**Wiring**

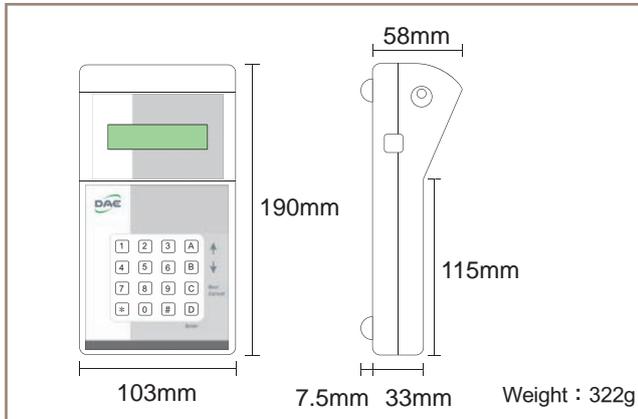


Item	Description	Item	Description
Power Consumption	less than 1VA	Function Keys	2 function keys for changing display modes
Standards Conformity	ISO 7816 T=1, T=0 communication protocol, Conforms to ISO7816-1/2/ 3	Buzzer	Buzzes when a card is inserted or for warning when the credit getting low.
Display	6 digit 7 segment LED. Shows kWh, remaining credits and tariff rate	LED indicators	Multiple; to indicate what is the currently displayed value
Power Supply	Derived from the meter to which it is connected	Operating Environment	Temperature: 32~140°F (0~60°C) Humidity: 0~90%RH (non-condensing)
Card Slot	Bottom insertion; for more than 100,000 insertion/removal cycles	Mounting	Wall mounted

\* Due to continuous product improvements, this datasheet is subject to change without notice.

## ICP840W Credit Dispensing Unit

### Dimensions



Item	Description
Display	Dot Matrix LCD display
Power	Power adaptor included, with on/off switch
Card Slot	Right side insertion; for more than 100,000 insertion/removal cycles
Keypad	Digits 0 to 9 with function keys
Buzzer	For keypad operations and setup
Security	System card needed to unlock unit prior to operation
Functionality	Credit dispensing, refunding and tariff change capabilities
Form Factor	Desktop

### Prepaid Smart Card



Item	Description
IC Chip	Conforms to SLE4442 Specification
Security	Password encoded data, highly secure
Write Cycles	Card may be reused and reloaded greater than 100,000 times
Temperature	up to 122°F (50°C)
Dimensions	54 x 86 x 0.76 mm (2.1 x 3.4 x 0.1 inches)

### Ordering Code

Models	Description
DEM912C-120V-60A	1p2w Energy Meter, 120V, 60A, 50Hz
DEM912C-240V-60A	1p2w Energy Meter, 240V, 60A, 50Hz
DEM913C-120/208-240V-60A	1p3w Energy Meter, 240/208-240V, 60A, 50Hz
DEM934C-240/416V-80A	3p4w Energy Meter, 240/416V, 80A, 50Hz
DEM934C-240/416V-10A	3p4w Energy Meter, 240/416V, 10A, 50Hz use with regular 5A output CTs
ICR840	Card Reader
ICP840W	Desktop Credit Dispensing Unit
Smart Card	Prepaid Smart Card for the 840 system

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