



ZPM-3 Data-sheet

Electricity Meter

Three Phase Power

Consumption & Generation monitoring sensor



Features:

- DIN Rail mounting
- Precision class 2%
- Output pulses at the rate of 100 pulses / kWh
- Dual pulse outputs, consumed power and returned power
- Pulse outputs optically isolated from mains (5kV)

The ZPM-3 is a low cost electricity meter that allows users to monitor 3 phase power usage and power returned to the grid in an independent way. This allows users to verify their power usage continuously and calculate the current cost of power on a real time basis.

If the users have renewable generators or solar panels installed. The ZPM-3 allows users to monitor delivered power and change their power usage patterns to minimise their overall power expenses.

Specifications:

Standards Approval:	AS61010-1
Mains Voltage:	415 VAC ~50Hz
Input current:	35mA RMS
Current monitoring:	0-53A RMS, 0-75A PEAK *
Power monitoring:	0-13kW (1300 pulses per hour) *
Output Isolation:	Optically Isolated 5KV
Output Type:	Open collector NPN transistor
Output pulse width:	70ms
Output Sink:	0.5mA max
Output Low voltage:	0.3V max
Measurement:	Each pulse = 10 watt-hours
Measurement Accuracy:	2%
Isolation:	CLASS II

Inputs:

1 Neutral	6	Current Transformer Phase A -	IAN	
2 Phase A	7	Current Transformer Phase B +	IBP	
3 Phase B	8	Current Transformer Phase B -	IBN	
4 Phase C	9	Current Transformer Phase C +	ICP	
5 Current Transformer Phase A +	IAP	10	Current Transformer Phase C -	ICN

Outputs:

12	Ground
13	Power Generated
14	Power Consumed

INSTALLATION:

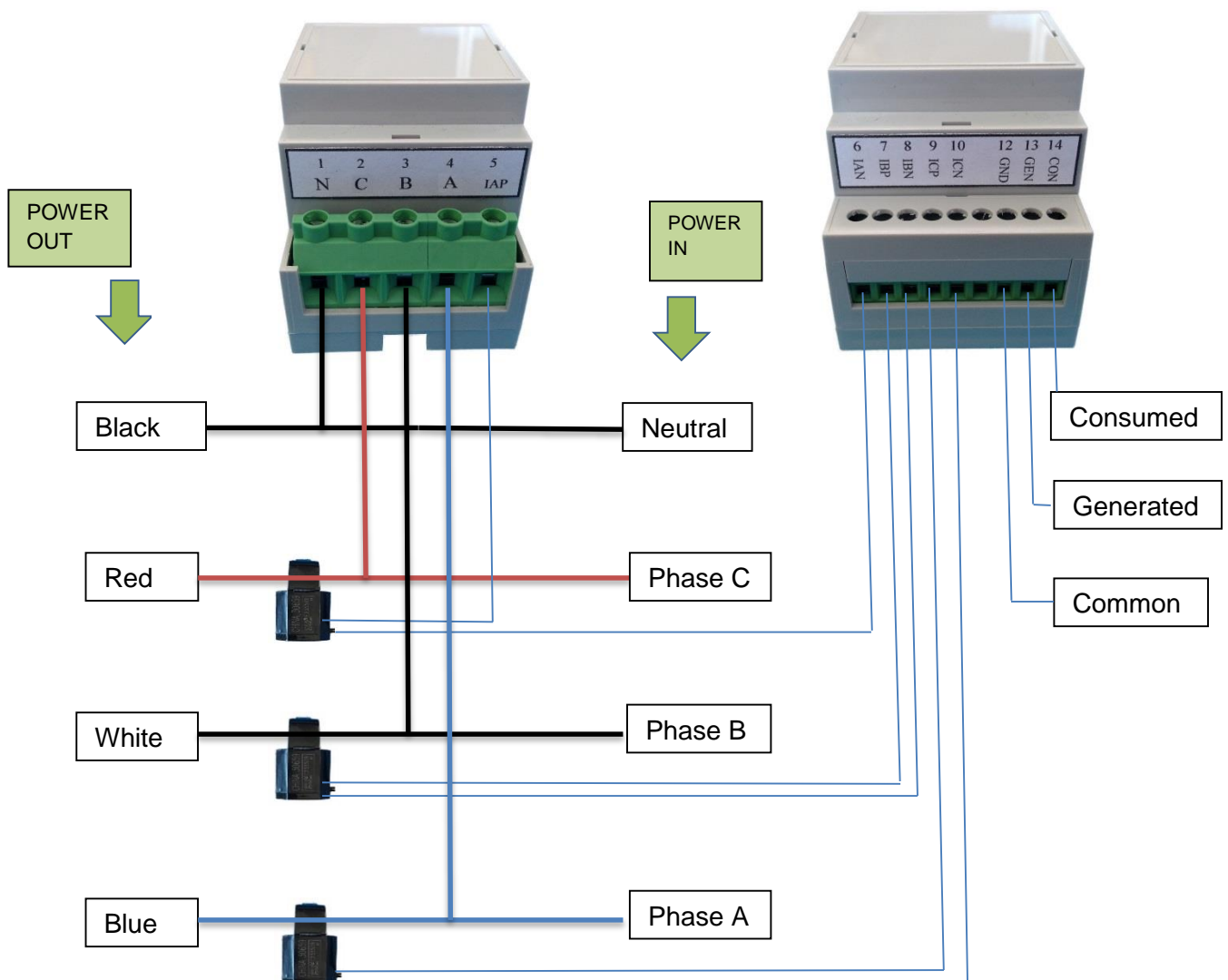
Installation of this product must only be carried out by qualified Electrical Contractors.

The product is for Indoor use only and is mounted on a standard DIN rail within the power meter box housing. The outputs may be connected to any approved logging device that will accept pulse inputs. One example is the Clift Innovations EPS Server or the Watersave SM-Batt-GSM module. Each output pulse corresponds to 10 Watt-Hours of either energy consumption or energy generation.

Wiring the Current Transformers:

The current transformers must be placed over the incoming ACTIVE LINES A,B,C, with the **dot on the transformer toward the Load or with the Arrow toward the Load**. Connect the black lead of the transformer to the Negative terminal for each transformer. These are designated IAN, IBN, ICN. The White leads go to the corresponding Positive terminals, IAP, IBP, ICP.

Connection Diagram:



REAL TIME DATA SERVICE

The ZPM-3 power meter can be used in conjunction with the Eco-Power-Saver (EPS) local area Server to supply real time energy consumption or generation immediately to any browser on the LAN.

Alternatively the data can be sent to the Eco-Power-Saver website and a secure personal account set-up. Your data can then be viewed real time from anywhere in the world. You also have the ability to download the data into a spreadsheet.



The EPS Server can accommodate up to 3 ZPM-3 inputs allowing 3 different three phase circuits to be monitored at the same time.



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