## Models Available
**A100C** Single Phase 100A Direct kWh Meter
**A1100** Three Phase 100A Direct kWh Meter

## Product Features
- Active energy (kWh) measurement
- 100A direct connection
- Single phase and 3 phase versions
- Surface mounting enclosure
- OFGEM approved
- Non-resettable
- Pulsed output option

# 100A Direct Connected kWh Meters

Direct connected kilowatt hour meters are suitable for the monitoring of active energy (kWh) in all types of metering applications of supplies up to 100A. Models are available for single phase and three phase, balanced or unbalanced loads and all the meters are OFGEM approved.

The meters are housed in a surface mounting enclosure and have a liquid crystal display. The meters have a non-volatile memory providing count retention in the power off condition and eliminating the need for any auxiliary power supply.

All meters are available with an optional voltage free pulsed output for input to data loggers, PLC's, building management systems or computers.

# kWh Meters – for measuring energy (kWh) consumption up to 100A directly

## Specification
**Approval:**
- OFGEM

**Accuracy:**
- A100C class 2 to IEC 62053-21
- A1100 class 1 to IEC 61036

**Counter:**
- 7 digit high contrast wide angle LCD
- 9.8mm x 3.5mm digits

**Counter Resolution:**
- 0.1 kWh

**Pulse Resolution:**
- 0.01 kWh

**Input Current, $I_n$:**
- 20-100A direct connected

**Input Voltage, $U_n$:**
- A100C: 230V
- A1100: 3x230/400V

**Voltage Variation:**
- A100C: 210-250V
- A1100: 220-240VL-N

**Frequency:**
- 50Hz (60Hz available upon request)

**Test Voltage:**
- 4kV rms 50Hz for 1 min (to IEC 414)

**Impulse Withstand:**
- A100C: 12kV 1.2/50µs 40ohm source
- A1100: 12kV 1.2/50µs 500ohm source

**Burden:**
- A100C: 0.66W (8.5VA) capacitive
- A1100: 0.9W (9VA) capacitive

## Specification Continued
**Current Circuit Burden:**
- A1100: 2VA at 100A/phase (maximum)

**Pulsed Output:**
- 20mA at 27Vdc maximum
- 100ms pulse length

**Pulsed Output Ratio:**
- 100 pulses/kWh (=10Wh/pulse)

**Optical Test Output:**
- A100C: LED flashes 1000 imp/kWh
- A1100: LED flashes 500 imp/kWh

**Enclosure Code:**
- Case IP53 to IEC 60529

**Operating Temperature:**
- -20°C to 55°C

**Storage Temperature:**
- -25°C to 85°C

**Humidity:**
- Annual mean 75%
- 95% for 30 days spread over one year

**Certified Product Life:**
- A100C: 20 years
- A1100: 10 years

**Connections:**
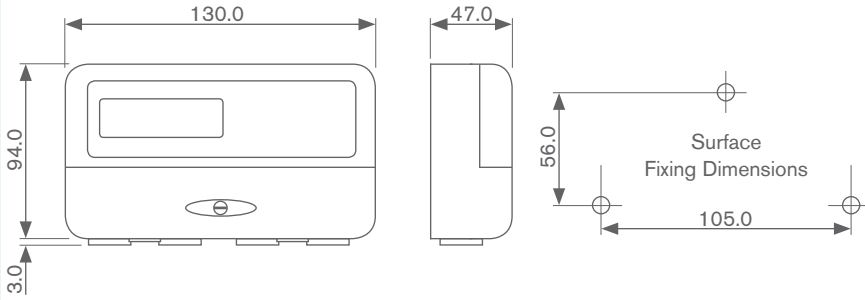- Screw type terminals

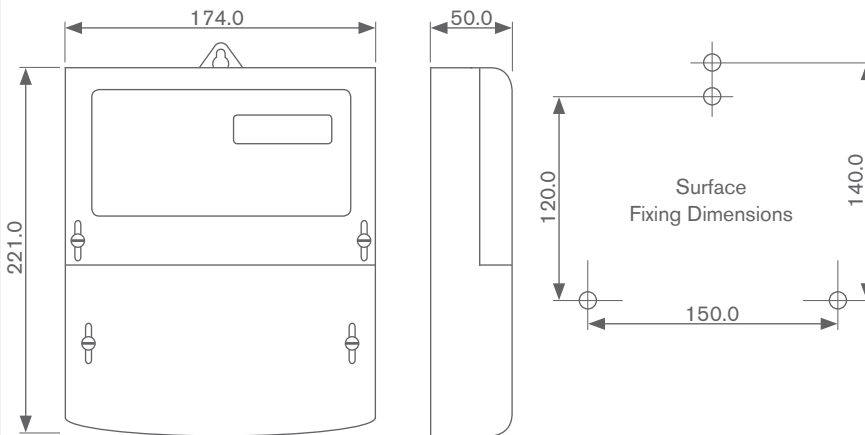**Weight:**
- A100C 350g, A1100 900g

**Markings:**
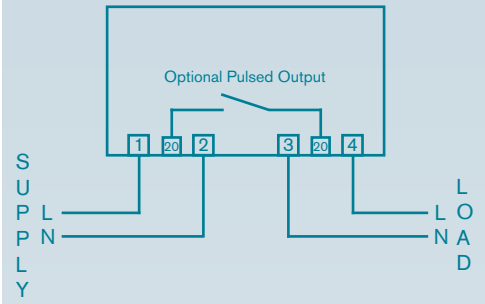- CE marked

Specification subject to change without notice.

Eltime Controls     Email: sales@eltime.co.uk     Web: www.eltime.co.uk     Continued...

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## Dimensions

### A100C



130.0   47.0

94.0

3.0

Surface
Fixing Dimensions

56.0

105.0

### A1100



174.0   50.0

221.0

120.0

Surface
Fixing Dimensions

140.0

150.0

All dimensions in mm

## Connections

### A100C



Optional Pulsed Output

1   20   2     3   20   4

SUPPLY   L    N

LOAD   L    N

### A1100



Pulsed
Output

1   3   4   6   7   9   10   12   20   21

SUPPLY   L1   L2   L3   N

LOAD   L1   L2   L3   N
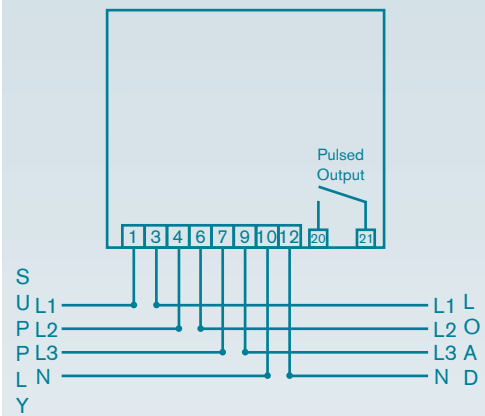
## Ordering information

| Code | Meter Type | Options |
|------|------------|---------|
| A100C | Single Phase 100A kWh Meter | – |
| A1100 | Three Phase 100A kWh Meter | – |
| P | – | Pulsed Output (Opto-isolated) |
| **Example** | **A100C** | **P** |