



# 5CTA

## Single Phase SMETS2 Electricity Meter



SMETS2  
GBCS

5CTA single phase SMETS2 ZIV electricity meter provides robust automated meter reading solutions for UK market.

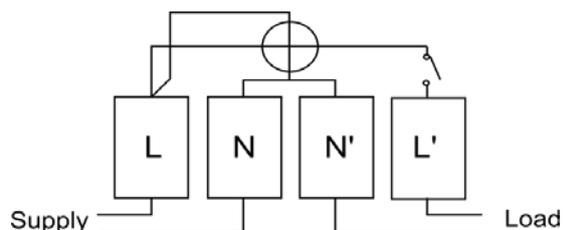
It integrates energy measurement, load profile, Time of Use (TOU) prepayment, and HAN devices communications via Comms Hub (IHD, PPMID). ZigBee remote communication capabilities enable complete meter operation. This includes data reading, configuration setting changes, date synchronization and operation of the built in breaker. These meters implement ZIV's own technology adapted to GB open standards. Compliance and certifications are detailed in the following sections.

### Terminals and connection diagram

Position, materials and dimensions in accordance to BS 5876.  
Symmetric input.

Load terminals with the following designations:

- L, N → Line and Neutral In (Supply side)
- N', L' → Neutral and Line Out (Load side)



## Certification and testing

Certification	Description
MID (EN 50470-1:2006) (EN 50470-3:2006)	Electricity metering equipment General requirements, tests and test conditions. Metering Equipment (class indexes A, B and C)
MID - Annex B	MID Directive on Measuring Instruments - Annex B
MID - Annex D	MID Directive
ZigBee	ZigBee Compliance
ZigBee SEP profile	Smart Energy Profile
DLMS	DLMS Compliance
CPA	Describing Foundation Grade Requirements
CPA Build Standard	Build Standard for CESG for CPA evaluation scheme
SMDA	Smart Metering Device Assurance

## Standards

List of standards <i>Versions available at Feb/2017 (*)</i>
MID normative reference (Adapted to British Standards)
SMETS V3.0 Draft 3 GB Smart metering requirements
GB Companion Specification V2.0 Draft 3 (GBCS)
Zigbee SEP 1.2a and 1.2b
DLMS/COSEM (DLMS UA Blue Book Ed. 12 and Green Book Ed. 8)
CPA Version 1.3 (SMETS2)
Intimate Communications Hub Interface Specifications (ICHIS)

(\*) **NOTE:** DCC system's versions will keep evolving and therefore the ESME will need to be adapted to be interoperable.

## Technical Information

	Single Phase S0 variant (5CTA)
<b>Dimensions (mm)</b>	135 x 130 x 64 NOTE: Height from the bottom to ICHIS fixation screw <b>120.55</b>
<b>Active energy accuracy</b>	Class B (EN 50470-3)
<b>Nominal current value</b>	10 A
<b>Maximum current</b>	100 A
<b>Sustained during an ext. period</b>	120 A
<b>Nominal voltage value</b>	230 V
<b>Built-in breaker nominal values</b>	120 A / 250 VAC
<b>Operating temperature</b>	-25°C to +55°C
<b>IP degree protection</b>	IP53

## Local user interface

- **Buttons:** Three buttons for user operation to provide the means for local prepayment credit entry, physical interaction to restore supply and manual display cycling. These will be marked with arrows (up, down and enter). PIN protection available for required screens.
- **Display:** 3 rows of 16 characters LCD, backlight provided. Characters of 5x8 points, as shown in the image below.

