

# AUTOMETERS

SYSTEMS

## Introduction

The DDS 285 is the new generation of smart meters to monitor and report on the ever increasing rise in the demand for energy. Fully MID Approved with full monitoring, logging and transmission of data to Energy Management systems the DDS 285 futureproofs communication requirements whilst keeping the display clear and easy to read.

## Specifications

The Energy meter meets the requirements of:

### IEC62052-11

Electricity metering equipment (a.c.) – General requirements, tests and test conditions – Part 11: Metering equipment.

### IEC 62053-21

Electricity metering equipment (a.c.) Particular requirements Part 21: Static meters for active energy (classes 1 and 2).

### EN 50470-1

Electricity metering equipment (a.c.) Part 1: General requirements, tests and test conditions Metering equipment (class indexes A, B and C).

### EN 50470-3

Electricity metering equipment (a.c.) Part 3: Particular requirements Static meters for active energy (class indexes A, B and C).

## Meter Parameters

### Basic Index

TYPE	PARAMETER
<b>Basic Parameter</b>	
Meter Type	1P2W (LN-NL, 1-4 manganin circuit)
Active Accuracy	Class 1.0 (IEC 62053-21), Class B (EN50470)
Rated Voltage	240V, Operating voltage: 0.7Un~1.2Un
Rated Frequency	50Hz
Current Specification	5(100)A
Starting Current	0.004Ib
Impulse Constant	1000 imp/kWh
Power Consumption	Current circuit: active power consumption <2.2 VA; Voltage circuit: active power consumption <1.8W, apparent power consumption <10VA;
Operating Temperature Range	-10°C ~ +60°C
<b>LED &amp; LCD Display</b>	
LED	1 bi-colour pulse LED output; When import current, LED red flashes; When export current, LED yellow flashes;
Energy Data Display	7+0 (configurable 5+2, 6+1)
<b>Test Type</b>	
Standard	EN 50470-1, EN 50470-3 IEC 62053-21, IEC 62052-11
<b>Mechanical</b>	
Terminal Box	BS
Enclosure Protection	IP54
Meter Case	Polycarbonate
Against mechanical stroke and shake	IEC62052-11, Parts 5.2.2.1, 5.2.2.2 & 5.2.2.3
Dimensions (LxWxH)	141x130x48.8mm (long) 100x130x48.8mm (short)
Weight	About 0.6kg

## Meter Function

### Energy Measurement

#### ■ Measurement mode:

- Total active energy = Total import active energy = |+A|

The measurement mode is factory configurable:

- Total active energy = |+A| + |-A|
- Total active energy = total export active energy = |-A|

#### ■ Measurement accuracy: active class 1.0.

#### ■ Measurement contents:

- Total import active energy
- Total export active energy
- Total active energy energy

## DDSD 285 kWh Import/Export Meter

Single Phase Meter with kWh pulse import/output

240 Volt, 50 Hz, 100 Amp



MID Approved "B" and "D"



### Display Module



Symbols on LCD	Description
Large number	Main display area, display active energy data
IMP	Abbreviation of Import, status indication of import active energy data display screen
EXP	Abbreviation of Export, status indication of export active energy data display screen
→ ←	Real-time indication of import/export current

### Display mode:

Button display

Scroll display

Display time: the interval of scroll display is 5s.

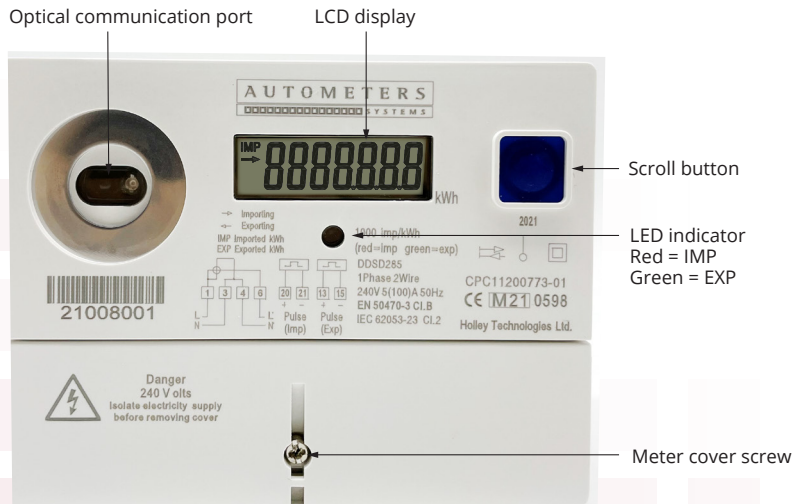
Display contents:

The contents of power on display and button display can be configured. Energy display will not display unit. Display list as follows:

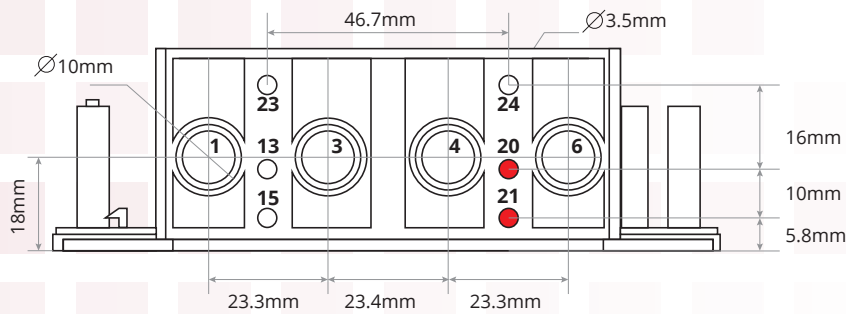
Display code	Description	Unit
1	Total import active	kWh
2	Total export active	kWh
3	Total active energy	kWh
4	Full screen	

Power off display: after the power off, the LCD will enter the full screen, and display as power on mode for about 1 minutes then automatically close. The LCD display can be activated again by pressing button. After activation, the first screen is full screen, and can switch via button after full screen. After about 1 minute, if there is no button operation, it will enter the off mode again.

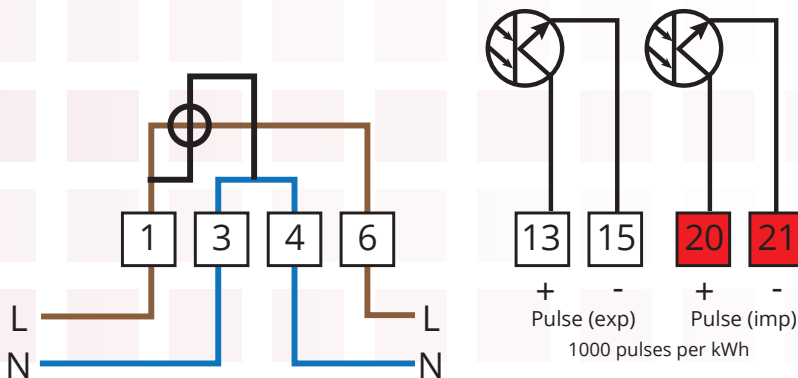
## Appearance



## Meter terminal dimensions

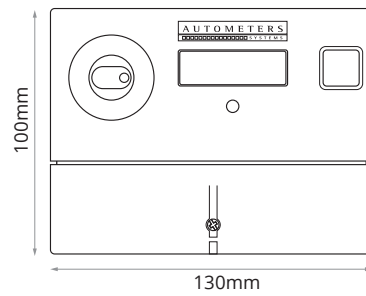


## Connection diagram

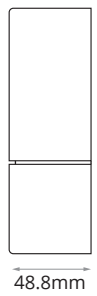


## Casing dimensions

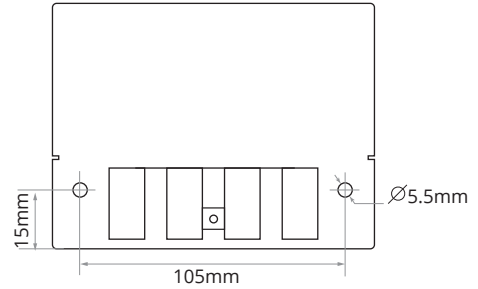
Short casing front view



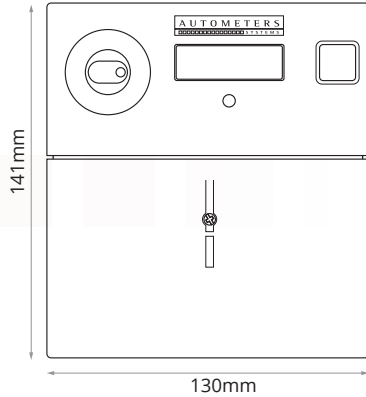
Side view



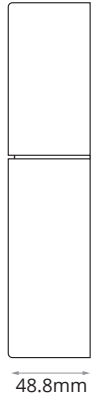
Mounting hole of short case back view



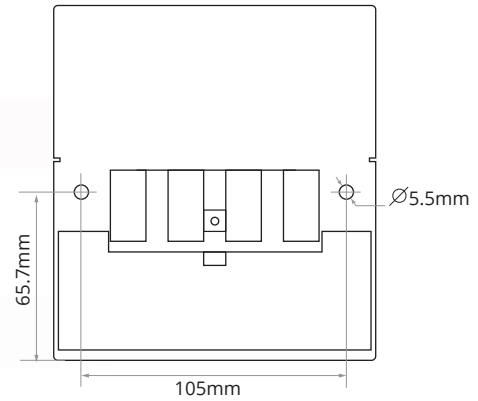
Long casing front view



Side view



Mounting hole of long case back view



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Autometers Systems Ltd.

4B Albany Road, Chorlton-cum-Hardy, Manchester M21 0AW

Email: sales@autometers.co.uk

Phone: 00(44) 0161 861 9056

Fax: 0161 881 3745

Web: www.autometers.co.uk