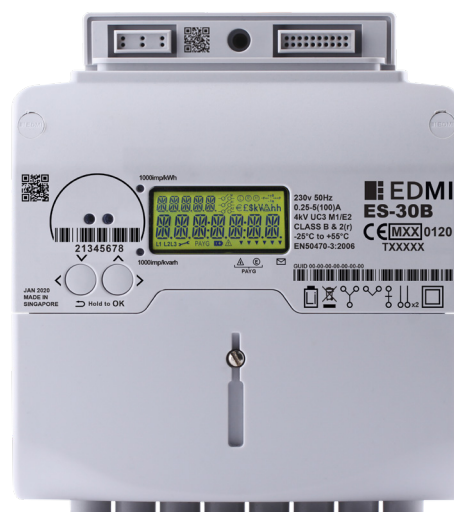


ES-30B

Class 1 and Class 2

Three Phase SMETS2
Electricity Smart Meter

Designed for the smart meter rollout in Great Britain, this direct current three phase electricity meter is another in our range of SMETS2 compliant solutions with a 100A disconnect relay and two 2A auxiliary load control switches.



Key Features


 MULTIPLE COMMS
OPTIONS


 ZIGBEE
ALLIANCE


 ANTI TAMPER


 HIGH
ACCURACY

P-PAY
 PREPAYMENT

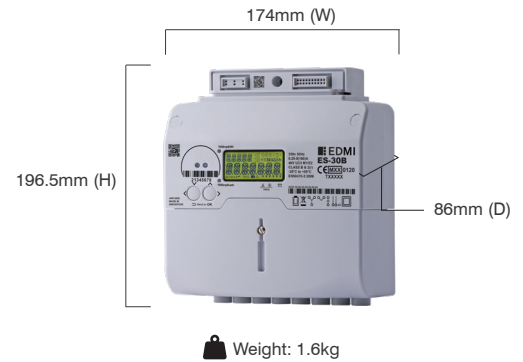

 DLMS
READY


 DISCONNECT
RELAY

ES-30B

Class 1 and Class 2

Three Phase SMETS2 Electricity Smart Meter



Standards and Compliance

- MID Class A or Class B, Class 1 or 2
- GBCS v3.2, SMETS2 v4.2, CPA v1.2, DLMS CTT 3.1, Zigbee 1.4b, ICHIS v2.2, Welmec 7.2 2015, RoHS 2012, WEEE 2013
- BS EN 50470-1:2006, 50470-3:2006, 62052-11:2003, 62055-31:2005-UC3
- IEC 62053-21:2003, 62053-23:2003, CLC/TR 50579
- EN 300328, 301489

Voltage

- Nominal voltage: 230V, 50Hz, 5(100) Class 1/(MID Class B)
- Operating range: 176V – 276V
- Minimum Current: 0.25A
- Reference Current: 5A
- Maximum Current: 100A
- Withstand: 460V
- Meter Constant [imp/kWh]: 1000

Current

- WC Range: 0.25/100A, 5/100A
- WC Limit: 3000A for 0.5 cycle
- Disconnect Relay: 100A
- Disconnect Rating: IEC 62052-31 UC3 @ I_{max}, 240 VAC

Frequency

- 47Hz - 52Hz

Inputs/Outputs Configuration

- 1000 imp/kWh pulsing LED Indicator
- 1000 imp/kvarh pulsing LED Indicator
- 2 x Relay auxiliary load control switches (ALCS) (240V, 2A)

Battery

- Internal battery for up to 1 year of shelf storage

Real-time Clock

- Accuracy (internal) within 10 seconds per month

Data Memory

- Up to 8 megabytes of Non-Volatile Memory

Display

- Backlit starburst liquid crystal display

Measured Values

- Active energy import (Wh)
- Reactive energy import (varh)
- Active energy export (Wh)
- Reactive energy export (varh)
- Voltage RMS (V)
- Maximum Demand Active Power Import and Export (W)

Power Quality Indication

- Sag/Swell
 - Records power events on configurable thresholds
 - RMS Voltage (over, under, swell, sag)
 - Supply Outage
 - Supply Interruption
 - Alerts

Calendar

- Supports Daylight Saving time as per GBCS

Tamper Detection and Alarms

- Tamper detection for terminal cover, meter cover and Communication Hub removal
- Tamper evident seals
- Wire seals for terminal cover and Communication Hub

Billing Data Log

- GBCS Compliant
 - Tariff TOU Register Matrix
 - Up to forty 48 plus unified rate
 - Tariff Block Count Matrix
 - 4 x 8 matrix for storing block counters and pricing
- Active Import Registers
- Prepayment
 - Prepayment Credits
 - Payment-based debt payments
 - Meter Balance
 - Emergency Credit Balance
 - Accumulated Debt Registers
 - Payment Debt Registers
 - Time Debt Registers

Security

- WOLF-SSL Cryptographic Library
 - GBCS security approaches, ECDH, SHA-256, AES-128 GCM
- Dedicated A7001 secure microcontroller
- 9 Trust Anchor Cells (TACs)
- Secure unlock mechanism for triage
- Commercial Product Assurance (CPA)
 - Secure provisioning process through EDMl supply chain

Communications

- Local optical port
- DLMS COSEM
- Zigbee Smart Energy Profile 1.4
- GBCS object support

Environmental

- Operating range: -25 °C to +55 °C
- Storage range limit: -40 °C to +70 °C
- Relative operating humidity: Up to 75%
- Storage humidity: 30% to 95%, non-condensing for 30 days
- Ingress protection: IP53 (without suction)

EDMI Limited (Singapore)

47 Yishun Industrial Park A,
Singapore 768724

EDMI Pty Ltd (Australia)

Level 7, 51 Alfred Street,
Fortitude Valley, Queensland
Australia 4006

EDMI Europe Limited (United Kingdom)

Form 1, 17 Barley Wood
Business Park, Bartley Way,
Hook, Hampshire RG27
9AXA, United Kingdom

EDMI America Inc. (USA)

One City Plaza, Suite 1301,
421 Fayetteville Street,
Raleigh, North Carolina,
27601 United States

www.edmi-meters.com



Visit our website at www.edmi-meters.com to find our other locations.

Copyright © 2025 EDMl Group. All Rights Reserved. All trademarks are the property of their respective holders. EDMl Group continuously develops its products and solutions and reserves the right to modify specifications contained herein without notice.