

EN31B

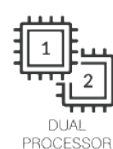
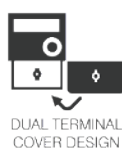
NEOS – Class 1 and Class 2

Three Phase Smart Meter with
Three-Element Feature

Built on the advanced NEOS metering platform, the EN31B is a three phase smart meter with integrated 100A UC3 compliant relays allowing remote disconnection and reconnection of electrical services. Flexible communication and I/O options are possible with the modular POD design.



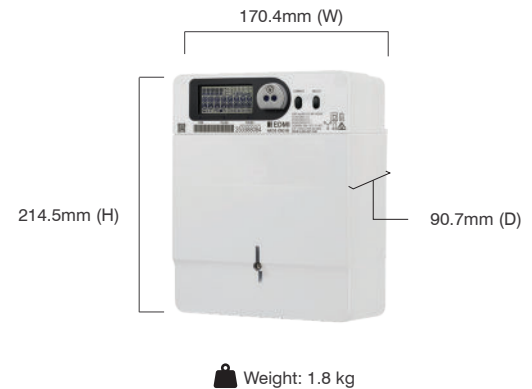
Key Features



EN31B

NEOS - Class 1 and Class 2

Three Phase Smart Meter with Three-Element Feature



Standards and Compliance

- Class 1 Wh and Class 2 varh
- IEC 62052-11:2020 Ed 2.0, 62052-21:2016 Ed 1.1 (clause 7.4), 62052-31:2015 Ed 1.0, 62053-21:2020 Ed 2.0, 62053-24:2020 Ed 2.0, 62054-21:2017 Ed 1.1 (time keeping clauses), 62059-32-1:2011 Ed 1.0
- AS 62052.11:2023, 62052.21:2018 (clause 7.4), 62052.31:2017, 62053.21:2023, 62053.24:2023, 62054.21:2018 (time keeping clauses)
- EIPC 2010 Part 10 Schedule 10.8 (Data storage clauses)
- NMI M13-1 2022

Measurement

- 1 phase 2 wire
- 1 phase 3 wire, 2 element
- 3 phase 4 wire, 3 element

Voltage

- Nominal voltage: 220V to 240V
- Operating range: 176V to 276V
- Withstand voltage: 456V

Current

- WC range: 5/100A, 10/100A

Safety

- Multiple temperature sensors
- Overvoltage category III (up to 4000m)
- Overvoltage category IV (up to 2000m)
- Insulation protective class II
- Surge voltage: 6 kV
- Impulse voltage: 12 kV (as per SPM1618)
- Overload current: 128A (as per IEC 62052-31)
- Inner terminal cover segregating LV and SELV circuits
- Disconnect relay - failure detection

Terminals

- Terminal hole diameter: 9.5mm
- Maximum 35mm² cable

Frequency

- 50Hz/60Hz +/- 6% variation from fn for accuracy

Inputs/Outputs Configuration

- Up to 3 x LED indicators
- Expandable I/O with PODs
- Buzzer*

Relay

- 3x 100A SCS, 80A LCS

Battery

- Replaceable lithium battery (550 mAh, 3.0V)
- Internal super capacitor*
- Backup time: 10 years without power at 25°C

Real-time Clock

- Clock accuracy: 15 seconds per month at 23°C
- High accuracy clock*
- Supports Daylight Saving Time

Data Memory

- 64M-bit Flash
- 2k-bit EEPROM*

Display

- Starburst-segment alphanumeric display
- Display available without main power
- White LED backlight

Measured Values

- 3 element 4 quadrants
- Import / Export
- Wh, varh and VAh
- Fundamental / Total power
- Vrms, Irms, Phase Angle, Frequency

Load Survey/Profile

- Up to 64 channels and 4 independent surveys
- Intervals programmable from 1 to 60 minutes
- Store measured and calculated quantities + pulse inputs
- Ability to store average/minimum/maximum/boundary values for interval duration

Time of Use

- Up to 8 rates plus unified rate
- Up to 32 separate import and export registers
- Daily, weekly, monthly, yearly and special days
- Up to 200 programmable special days
- Up to 13 previous billing periods plus the billing total and cumulative total
- Block or rolling maximum demand
- Time of maximum demand
- Energy, Pulsing Inputs

Tamper Detection and Alarms

- Terminal cover sealing with wire or plastic seals
- Reverse current detection
- Cover removal
- Magnetic field detection
- Cover seals

Security

- Multi-level security (username and password including encrypted log-in)
- Up to 7 independent security levels
- Up to 6 individual users

Communications

- Optical port: FLAG / ANSI (IEC 62056-21)
- Multiple communication options available

Protocol

- EDML command line

Environmental

- Specified operating range: -25°C to +60°C
- Operating range limit: -40°C to +70°C
- Storage range limit: -40°C to +80°C
- Relative humidity: Up to 75% mean, 95%, non-condensing for 30 days
- Ingress protection: IP54
- Solar Radiation IEC 60068-2-5, ISO 4892-3

* Optional

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 © 2026 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.