AS330D

Single Phase Smart Meter

.....

Applications

Residential

Brief Description

The AS330D forms an integral part of Elster's AMI solution that manages data from Smart Electricity, Gas and Water meters. MDMS and Head End applications are available to meet individual utility requirements.

WAN communications is provided by an integrated OFDM PRIME PLC. Communications are in accordance with the PRIME Standard DLMS COSEM mac layer with an IEC 61334-4-32 convergence layer. The status of the modem can be monitored by a multi-coloured LED.

The AS330D offers a highly flexible platform that should match current and anticipated market needs. The product is focused on the Spanish requirements, therefore matching the existing requirements of advanced metering. The hardware is specifically designed to meet all the current requirements of Type 5 Metering Standard. The firmware meets the requirements of Type 5 and has been verified against the KEMA test tool. The firmware is downloadable allowing any future enhancements to be introduced at a future date. The metrological code cannot be updated as this runs on a separate microprocessor.

Smart Grid applications in the future will greatly benefit from the existence of Smart Meters installed on the networks. The AS330D has been designed to anticipate this requirement of smart grids, the meter offers selectable and definable power quality monitoring as well as instrumentation profiling. By utilising this comprehensive information, utilities/network operators can gain a detailed understanding of their network performance.

Approvals: EC Directive 2004/22/EC (MID), kWh Class A or Class B, IEC EN62053 -23, kvarh Class 2 or Class 3.



Features

- Integrated PLC, WAN communications
- Full measurement capability Import/Export kWh Q1 - Q4 kvarh
- Flexible tariff
 3 Concurrent tariffs
 6 Time of use registers
 6 MD registers
- 2 Line dot matrix display
- Menu driven display
- Visualisation spec
- 2 Push buttons
- DLMS protocol
- Type 5 Companion Standard
- Optical communications port
- Firmware download
- Load profiling
- Hourly (90 days)
- Daily (90 days)
- Instrumentation
- Power quality monitoring
- Integrated contractor
- Extensive security data
- 12 Sets historic billing information
- 10 Sets daily information
- Electronic output optional

Compliance

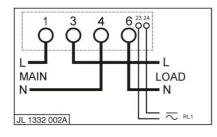
- MID & IEC Accuracy
- Type 5

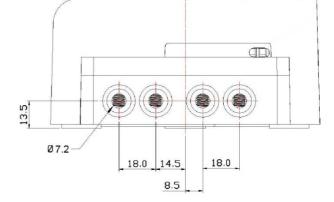




Technical Data

Current: IEC Ratings	20 - 60A, 10 - 60A, 5 - 60A [lb-Imax]
MID/EN Rating	0.5 - 10 (60)A, 0.25 - 5 (60)A [Imin - Iref (Imax)]
Frequency	50 Hz
Reference Voltage	230V a.c.
Voltage Operating Range	±20%
Short Circuit Current	Short circuit current withstand: 30 Imax
Insulation Voltage	4000 Vac 1 min
Maximum Neutral Fault Voltage	1.9 Un (UNE EN 50470-3)
Maximum Phase Consumption (Voltage)	≤ 2W, ≤ 10VA (UNE EN 50470-3)
Maximum Phase Consumption (Current)	≤ 2.5VA (UNE EN 50470-3) at Iref
EMC Compatibility Surge Withstand (1,2/50µs)	6kV, R _{source} = 2 Ohm
Dielectric Test	12kV, R _{source} = 40 Ohm (only between main terminals)
	4kV, 1 min, 50 Hz
Display	High contrast, 2 Line Display. Wide Viewing Angle
Meter Constant (pulsing LED output)	4000 kWh - Default (Wavelength 880nm)
Pulse Width	5 ms
Auxiliary Relay	0.5A, 250 Vac
Product Design Life	20 years
Service Design Life	15 years
Temperature	Specified Operational Range: -25° C to +55° C
	Limit Operating Range: -25° C to +70° C
	Storage Range: -25° C to +70° C
Humidity	Non - Condensing
	Annual Mean 75% (95% for 30 days spread over one year)
Dimensions	230.2mm (High) x 131.90mm (Wide) x 65mm (Deep)
Weight	739g - Long terminal cover
Accuracy Class kWh	EC Directive 2004/22/EC (MID) - Class A or Class B. (EN 50470-3)
	IEC 62053-21, Class 1 or Class 2
kvarh	Class 2 or Class 3 - EN 62053-23
Case	Generally to DIN 43857
	IP53 to IEC 60529:1989
Terminals Main	7.2 mm cable entry, M6 (x2) Terminal Screws - max torque 2.8 N m
Auxiliary	2.5 mm bores, M3 Terminal Screws - max torque 0.45 N m





elster Vital Connections Elster Metering Ltd Tollgate Business Park Paton Drive Beaconside Stafford Staffordshire ST16 3EF

T +44 (0)1785 275200 www.elstermetering.co.uk F +44 (0)1785 275305 enquiries@gb.elster.com

© 2011 by Elster. All rights reserved. The company's policy is one of continuous product improvement and the right is reserved to modify the specifications contained herein without notice.