

GAMA 300

Three-phase electricity meter
for residential, commercial and
industrial metering



- Measurement of active energy (bidirectional), reactive energy (in 4-quadrants) and maximum demand
- Accuracy class 1.0 (B) or 0.5s (C)
- Measurement in two channels (on phase and neutral lines)
- Single or Multi-tariff (up to 6 tariffs)
- Internal real time clock
- Load and billing profiles, instantaneous values
- Extended anti-tamper features
- Event logbook (power outage, power over-limit, reverse current flow, influence of magnetic field, opening of meter cover, opening of terminal cover, clock setting, parameter change, internal error, firmware update)
- Optical and electrical communication interfaces in accordance with IEC 62056-21 and/or DLMS/COSEM
- Internal communication modules (PLC modem, USB host, wireless or wired MBus, RS485, Ethernet), powering of external modem
- High-level security (encryption and authentication)
- Internal relay for user disconnection
- Power quality monitoring (over-voltage, under-voltage, over-current)
- Measurement of Total Harmonic Distortion (THD)
- Registration of line and transformer losses on the basis of I^2h and U^2h measurements



Technical Specification

GAMA 300

Ratings

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|--------------------------------------|--|
| • Connection type | Three-phase 4-wire or 3-wire |
| • Accuracy class: | |
| - for active energy | class 1.0 (IEC 62053-21), class B (EN 50470-3) |
| - for active energy, CT only | class 0.5s (IEC 62053-22), class C (EN 50470-3) |
| - for reactive energy | class 2.0 (IEC 62053-23) |
| • Reference voltage, V: | |
| - 4 wire networks | 3x220/380; 3x230/400; 3x240/415; 3x57,7/100; 3x63,5/110; 3x69,2/120; 3x120/208; 3x127/220 |
| - Multi-range | 3x57,7/100...230/400 |
| - 3 wire networks | 3x100; 3x110; 3x120; 3x220; 3x230 |
| • Reference (maximum) current, A: | |
| - Direct connected | 5(60); 5(80); 5(100); 5(120); 10(60); 10(80); 10(100); 1(1,25); 1(6); |
| - CT operated | 5(6,25); 5(10); |
| • Starting current | 0,4% I_b (0,1% I_b if CT operated) |
| • Reference Frequency, Hz | 50 or 60 |
| • Meter constant, imp/kWh, imp/kVArh | 1...19999 (direct), 1...60000 (CT operated) |
| • Power consumption per phase: | |
| - In voltage circuit | <1.0 VA (<0,5 W) <2.3 VA (<0.8 W) (with auxiliary electrical interface) <10 VA (<1.5 W) (with PLC modem) <10 VA (<2.2 W) (with PLC and wireless MBus modules) |
| - In current circuit | < 0,05 VA (< 0,5 VA if CT operated) |
| • Temperature range | -40°C to +70°C |

Internal real-time clock

| | |
|---|---------------------------------|
| • Accuracy | < 0,5 s/24h (T = 23°C) |
| • Backup power supply | Li-ion battery and/or Super Cap |
| • Li-ion battery | Changeable or internal |
| • Operation duration using only backup: | |
| - Li-ion battery | > 12 years |
| - Super Cap | up to 7 days |

Case & Dimensions

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|--------------------|-----------------------------|
| • Case | UV stabilized polycarbonate |
| • Insulation | Protective class II |
| • Protection class | IP53 (Optional IP54) |
| • Dimensions, mm | 260 × 175 × 80 |
| • Weight, kg | < 1.5 kg |

