

DB2M MG

DIGITAL SINGLE-PHASE MULTIFUNCTION METER

DB2M MG is a single-phase two-tariff class 1 or 2 digital watt-hour meter and class 2 or 3 var-hour meter. Meter is intended for two wires direct connection in domestic and industrial applications. Meter has two maximum demand indicators of 15-minute mean active power, P1 for first and P2 for second tariff.

Current and voltage operating ranges are 40A, 60A, 80A or 100A (Base current 10A or 5A), and 230V.

Meter **DB2M MG** includes clock for maximum demand indicator control. External input for tariff control is also available.

Meter **DB2M MG** has pulse outputs, and LED diodes for pulse out and tariff indication.

Measured values of active energy, maximum of power, active tariff, power, voltage and current, time and date are shown on LCD indicator, cyclically.

Meter **DB2M MG** can be equipped by:

- external inputs for control up to four tariffs;
- switch clock for tariff control, which is programmable by Psion (software PSIRTC) or by PC (software RTCTIME);
- optical infrared port, which provides meter reading and programming by Psion (software PsiDB2) or by PC (software DB2IEC).

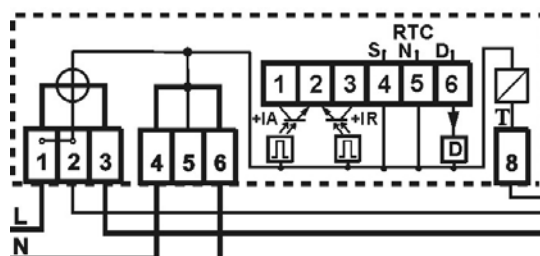
Meter **DB2M MG** can be programmed to register and record:

- values of active and reactive energy counters and maximum demand indicators on the first day of month at 00.00h, for 16 months. Data could be accessible through display and optical port.
- values of active and reactive energy counters and maximum demand indicators at up to 40 arbitrary points with resolution of 1h. Data are accessible trough optical port.

Watt-hour meter **DB2M MG** is a multiprocessor system based on digital processing of input current and voltage obtained by A/D converters. Power of microcomputers provides application of complex algorithms for tariff, load management, data processing, tests and communications.

Device **DB2M MG** is realized in VLSI CMOS technology having reliability, low power consumption, operation in wide range of ambient temperatures, and low aging.

Connection diagram



Technical characteristics

Type	DB2M
Rated voltage V_n	230V (+15%, -20%)
Rated frequency f_n	50 Hz
Base current I_B	10A or 5A
Maximum current I_M	100A, direct connection

Constants of meter	1000 impulses/kWh 250 impulses/kWh
Class of accuracy active	IEC 1036 class 1 or 2
Class of accuracy reactive	IEC 1268 class 2 or 3
Starting current threshold	< 50mA
Pulse out:	optocoupled, S0, IEC 62053-31, Class B, 1Wh/pulse
voltage (max)	15V
current (max)	15mA
duration	30ms
Optical infrared port	IEC 61107, Mode A

Power consumption:	
voltage circuit at V_n	< 1W (9VA)
current circuit	< 0.5VA
AC voltage withstand	4kV, 50Hz, 1 minute
Impulse voltage withstand	6kV, 1.2/50 μ s
Operating temperature range	-20°C, +60°C
Ambient relative humidity	<90%
Case dimensions	237x130x66 mm
Hole for wire	6.5 mm diameter
Weight	0.5 Kg

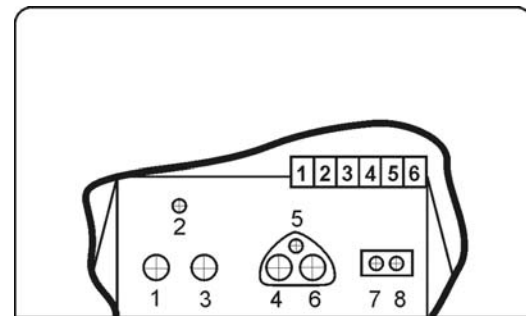
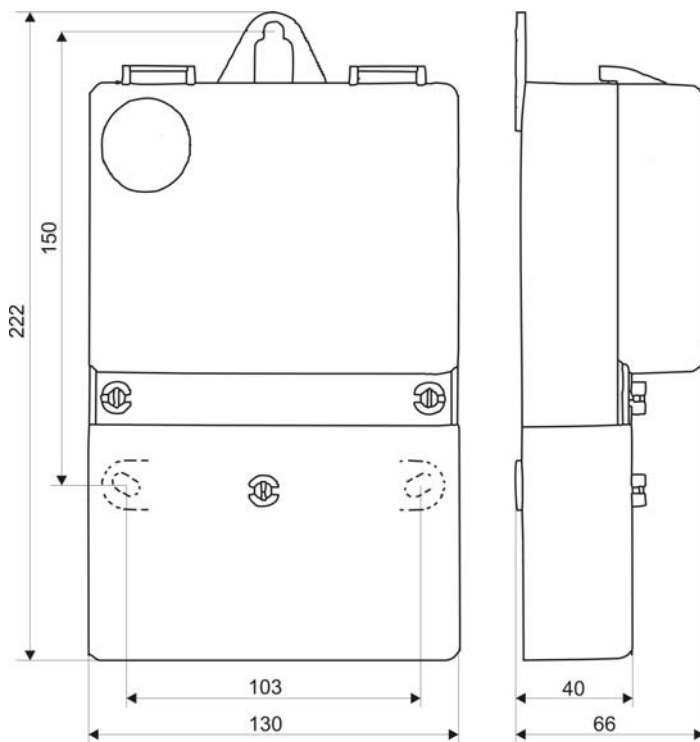
Function of maximum demand indicator of class 1

Class of accuracy	IEC 211 class 1
Measurement period for mean power measurement	15 minute
Reset time	9s

Function of switch clock

Real time clock stability	± 1 minute/month
Expected battery life	> 17 years
Optical infrared port	IEC 61107, Mode A

Assembling data



Ordering information

DB2M MG	US	60A	1;2;1	OC	4T
model	switch	max.	class	optical	four
	clock	current		port	tariffs

Additional data and price list are available upon request.

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