

METERING INSTRUMENTS AND CURRENT TRANSFORMERS

Digital Measuring Instruments



Modular LCD multimeters non expandable



DMG 1...



DMG 200 - DMG 210



Order code	Description	Qty per pkg.	Wt
		n°	[kg]
DMG 100	Icon LCD, auxiliary supply 100...240VAC/120...250VDC. Multilanguage: Italian, English, French, Spanish, Portuguese and German	1	0.294
DMG 101	Icon LCD, auxiliary supply 100...240VAC/120...250VDC, 2 digital inputs and 2 outputs. Multilanguage: Italian, English, French, Spanish, Portuguese and German	1	0.294
DMG 110	Icon LCD, RS485 port, auxiliary supply 100...240VAC/120...250VDC. Multilanguage: Italian, English, French, Spanish, Portuguese and German	1	0.294
DMG 200	Graphic 128x80 pixel LCD, auxiliary supply 100-240VAC/110-250VDC. Multilanguage: Italian, English, French, Spanish and Portuguese	1	0.294
DMG 210	Graphic 128x80 pixel LCD, RS485 port, auxiliary supply 100-240VAC/110-250VDC. Multilanguage: Italian, English, French, Spanish and Portuguese	1	0.300

General characteristics

DMG... digital multimeters are available with a modular housing, 4 module size, and are equipped with a graphic backlight LCD (except DMG 100/101/110 with icon display) capable of providing extremely clear, intuitive and flexible viewing of all electrical parameters of an installation. For DMG 110 and DMG 210 versions, there is a built-in isolated RS485 interface, while DMG 101 features 2 programmable digital inputs and 2 outputs.

Main measurements:

- Voltage: phase, line and system values
- Current: phase values (neutral current calculated)
- Power: apparent, active and reactive phase and total values
- P.F.: Power Factor per phase and total
- Frequency of measured voltage value
- HIGH-LOW-AVERAGE value functions of all measurements
- Maximum demand of power and current values
- asymmetric voltage and current
- Total harmonic distortion (THD) of voltage and current values
- Energy meters for active, reactive and apparent values
- hour counter (total and partial, 1 on DMG 200/210, 4 programmable on DMG 100/101/110)
- phase energy (DMG 100/110)
- harmonic analysis up to the 15th order (DMG 100/110).

Operational characteristic

- Auxiliary supply voltage range: 85...264VAC / 93.5...300VDC
- maximum rated measurement voltage
 - 600VAC (DMG 100/101/110)
 - 690VAC (DMG 200/210)
- Voltage measurement range:
 - 50...720VAC phase-to-phase (DMG 100/101/110)
 - 20...830VAC phase-to-phase (DMG 200/210)
- Usage in medium and high-voltage systems with voltage transformers
- Rated input current: With external CT /5A (also 1A for DMG 100/101/110)
- Current measurement range with CT up to 10,000A
- Frequency measurement range: 45-66Hz
- True RMS measurements for voltage and current values
- Accuracy:
 - Voltage: $\pm 0,5\%$ (50...720VAC for DMG 1...)
 - (50...830VAC) for DMG 2...
 - Current: $\pm 0,5\%$ (0,1...1,1In)
 - Power: $\pm 1\%$ f.s.
 - Frequency: $\pm 0,05\%$
 - Active energy: Class 1 (IEC/EN 62053-21)
 - Reactive energy: Class 2 (IEC/EN 62053-23)
- Non-volatile memory for data storage
- Communication protocol Modbus-RTU and ASCII (only for DMG 210 and DMG 110)
- Programming and remote control by software (only for DMG 210 and DMG 110; compatible with Synergy and Xpress software)
- Modular housing, 4 module
- Degree of protection: IP40 on front; IP20 at terminals.

CURRENT TRANSFORMERS OF DMG... KITS

- Operating frequency: 50...60Hz
- Secondary output current: 5A
- Overload withstand: 120% I_{pn}
- Rated insulation voltage U_i: 720V
- Rated short time thermal current I_{th}: 40...60I_{pn} for 1 second
- Rated dynamic current I_{dyn}: 2.5I_{th} for 1 second
- Insulation (dry type): class E
- Faston terminals
- Degree of protection: IP30.

Synergy supervision and energy management software
See page 16-22.

Xpress configuration and remote control software
See page 16-25.

Certifications and compliance

Certifications obtained: cULus, EAC.
Compliant with standards: IEC/EN 61010-1, IEC/EN 61000-6-2, IEC/EN 61000-6-4; UL61010-1, CSA C22.2 n° 61010-1 for DMG 100/110 (DMG 101 pending); UL508, CSA C22.2 n° 14 for DMG 200/210; IEC/EN 60044-1 for transformers of starter kits.

Starter kits



DMG KIT 100 150



Order code	Description	Qty per pkg.	Wt
		n°	[kg]
DMG KIT 100 060	Composed of one DMG 100 multimeter and n°3 CTs 60/5A for Ø22mm cable	1	1.035
DMG KIT 100 100	Composed of one DMG 100 multimeter and n°3 CTs 100/5A for Ø22mm cable	1	1.035
DMG KIT 100 150	Composed of one DMG 100 multimeter and n°3 CTs 150/5A for Ø23mm cable	1	0.856
DMG KIT 100 250	Composed of one DMG 100 multimeter and n°3 CTs 200/5A for Ø23mm cable	1	0.856

