



DMG900



DMG900T



DMG900RD



EXP1004



EXP1015

**Flush mounting expandable digital multimeters (96 x 96 mm)**

- Graphic touch-screen LCD display for extremely simple interaction
- Rear expansion slots accept plug-in modules suitable for numerous applications
- True RMS measurements of voltage and current values

**Main measurements and functions :**

- Voltage: phase, phase-neutral and ground neutral-earth
- Current: phase values
- Neutral current calculated and true values
- Power: apparent, active and reactive phase and total values
- P.F. Power Factor per phase and total
- Cosφ per phase
- Frequency of measured voltage value
- Voltage and current asymmetry
- Total harmonic distortion (THD) of voltage and current
- Harmonic analysis of voltage and current up to the 63<sup>rd</sup> order
- HIGH-LOW-AVERAGE value functions for all measurements
- Maximum demand of power and current values
- Energy meters with programmable tariff functions
- Hour counter for programmable total and partial hours
- Pulse counter for consumption of water, gas, etc. (only with expansion module)
- Energy quality analysis to EN 50160 (only with expansion module)

type	description	expansion slots
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**DMG900 series** *Graphic touch-screen LCD display*

- Auxiliary power supply: 100 - 440 VAC / 110 - 250 VDC
- Input current: CT - 1A or 5A
- Voltage measurement: 20 - 830 VAC L-L / 10 - 480 VAC L-N
- Accuracy:
 

voltage/current	±0.2%
power/power factor	±0.5% f.s.
frequency	±0.05%
active energy	Class 0.5S (IEC/EN 62053-22)
reactive energy:	Class 2 (IEC/EN 62053-23)

<b>DMG900</b>	panel mount power analyser	4
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**DMG900T series** *DIN rail mount measurement transducer (expandable)*

DIN rail mounting measurement transducer for chassis mounting, incorporating 4 expansion slots to accommodate expansion modules for added I/O's or communication requirements.

<b>DMG900T</b>	panel mount power analyser (without screen)	4
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<b>DMG900RD</b>	remote panel mount (96 x 96 mm) touch screen display for above DMG900T	
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**Expansion modules and accessories for DMG600/700/800/900**

**Inputs and outputs**

- EXP1000** 4 digital opto-isolated inputs
- EXP1001** 4 static opto-isolated outputs
- EXP1002** 2 digital inputs and 2 static outputs, opto-isolated
- EXP1003** 2 output relays (5A 250 VAC)
- EXP1004** 2 analog opto-isolated inputs 0/4 -20mA or 0-5/10V (only for **DMG800/900**)
- EXP1005** 2 analog opto-isolated outputs 0/4 -20mA or 0-5/10V (only for **DMG800/900**)

**Communication ports**

- EXP1010** opto-isolated USB interface
- EXP1011** opto-isolated RS232 interface
- EXP1012** opto-isolated RS485 interface
- EXP1013** opto-isolated Ethernet interface
- EXP1014** opto-isolated Profibus-DP interface (only for **DMG800/900**)
- EXP1015** GPRS/GSM modem without antenna (only for **DMG900**)
- EXP1030** data storage, clock-calendar \ backup for data logging (only for **DMG800/900**)
- EXP1031** as above with energy quality (EN 50160) (only for **DMG900/900T**)

**Software and accessories for DMG300/700/800/900**

- C2** PC - RS232 connecting cable (1.8m)
- CX03** GSM Quad-band antenna for **EXP1015** (850/900/1800/1900/2100MHz)



EXP...



CX02



CX01

**Expansion modules for controllers**

EXP series expansion modules add extra functionality to following panel mount products:

- DMG** 600/700/800/900 - Digital multimeters and power analysers
- DCRL** and **DCRG** - Automatic power factor controllers
- ATL** 610/800/900 - Automatic transfer controllers
- RGK** 400/600/750/800/900 - Generator controllers

type	inputs	outputs	description
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**EXP expansion modules** *(plug into rear of controller to add more functionality)*

**Inputs/Outputs**

<b>EXP1006</b>	-	2 relay	to increase number of capacitor steps
<b>EXP1007</b>	-	3 relay	to increase number of capacitor steps
<b>EXP1000</b>	4 digital	-	opto-isolated digital inputs
<b>EXP1001</b>	-	4 static	opto isolated to increase static steps
<b>EXP1002</b>	2 digital	2 static	opto-isolated digital inputs and static outputs
<b>EXP1003</b>	-	2 relay	outputs rated 5A 250 VAC
<b>EXP1004</b>	2 analog	-	opto-isolated PT100, 0/4-20mA, 0-10V, 0...±5V
<b>EXP1005</b>	-	2 analog	opto-isolated 0/4-20mA or 0-10V or 0...±5V
<b>EXP1016</b>	3ph (A)	-	+ 2 x NTC for capacitor bank protection

**Communication**

<b>EXP1010</b>	USB	-	opto-isolated USB interface
<b>EXP1011</b>	RS232	-	opto-isolated RS232 interface
<b>EXP1012</b>	RS485	-	opto-isolated RS485 interface
<b>EXP1013</b>	Ethernet	-	opto-isolated Ethernet with web server function
<b>EXP1014</b>	Profibus	-	opto-isolated Profibus-DP interface
<b>EXP1015</b>	GSM	-	GPRS/GSM modem without antenna

**Accessories**

<b>C2</b>	PC - DCRL/DCRG connecting cable + EXP10 11 module
<b>C9</b>	PC - Analog modem connecting cable
<b>CX01</b>	PC - controller USB dongle with connecting cable
<b>CX02</b>	PC - Controller Wi-Fi dongle for programming, data download, diagnostics
<b>CX03</b>	GSM Quad-band antenna for EXP10 15 modem (800/900/1800/1900MHz)