

Product Environmental Profile

EasyLogic PM2230 Power and Energy meter LCD display, RS485, class 0.5S



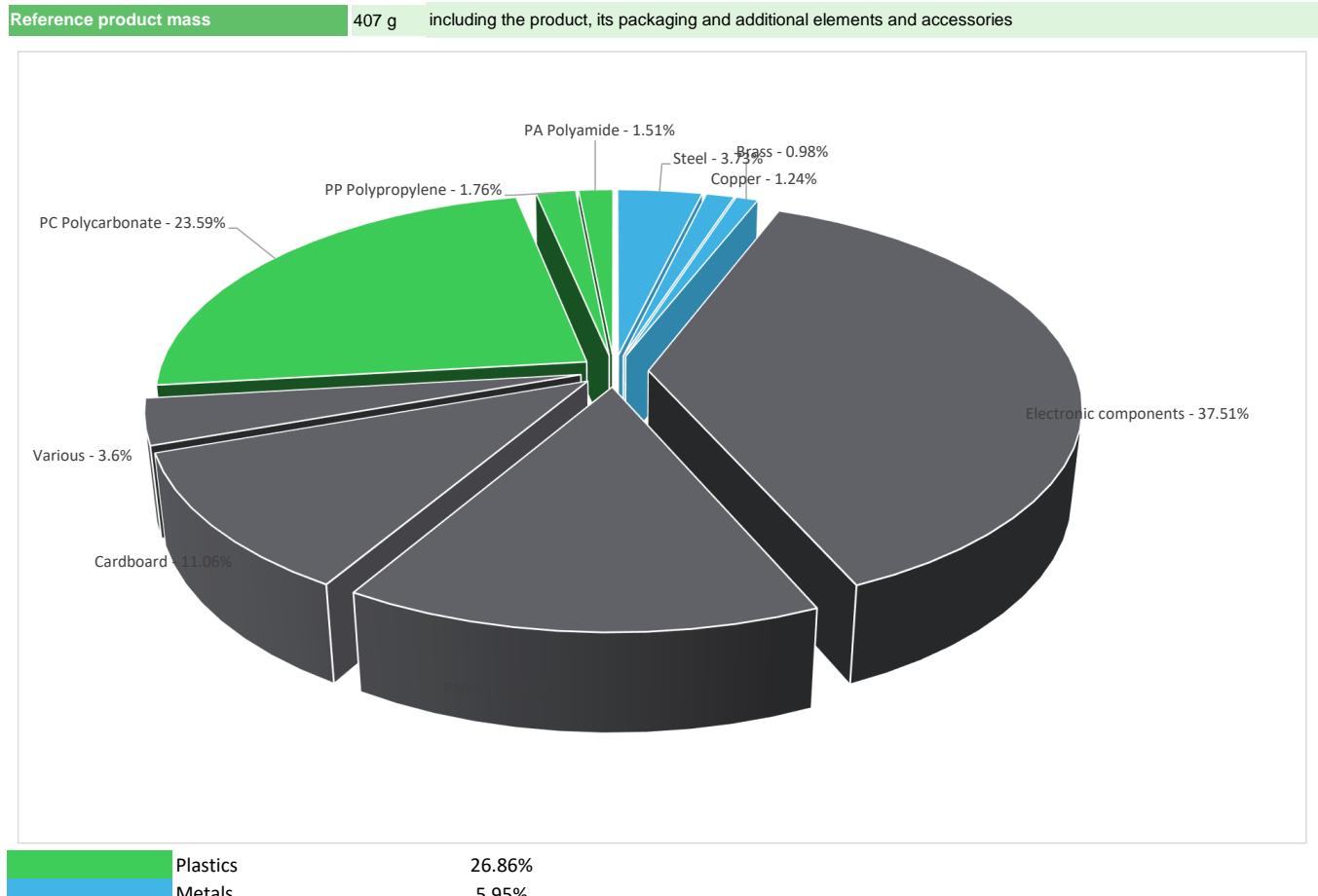


General information

Reference product	EasyLogic PM2230 Power and Energy meter LCD display, RS485, class 0.5S - METSEPM2230
Description of the product	The METSEPM2230 is a power and energy meter with advanced functionality for monitoring electrical parameters, power quality, and energy usage. Its primary function is to measure, monitor, and analyze energy consumption, as well as to provide insights into power quality to help optimize energy usage and ensure efficient operation. It is commonly used in industrial, commercial, and residential settings to support energy management and power quality monitoring.
Description of the range	Single product
Functional unit	PM2230 is a power and energy meter that provides functions such as measuring electrical parameters, monitoring power quality, and enabling energy management during 10 years. It helps users analyze and optimize energy usage while ensuring power quality and reliability.
Specifications are:	Measured Current = 5...6000 mA Maximum withstand voltage = 80...277 V AC 45–65 Hz +/- 10% 100...277 V DC +/- 10% Normal operating power consumption = 3.3 W at 277 V Standards - EN/IEC 61010-1 Degree of protection - IP20 conforming to IEC 60529



Constituent materials



Substance assessment

Details of ROHS and REACH substances information are available on the Schneider-Electric Green Premium website
<https://www.se.com/ww/en/work/support/green-premium/>



Additional environmental information

End Of Life	Recyclability potential:	14%	The recyclability rate was calculated from the recycling rates of each material making up the product with the exception of data using the ESR database. For materials or components using the ESR database or the absence of data the conservative hypothesis "0% recyclability" was used.
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Environmental impacts

Reference service life time	10 years			
Product category	Other equipments - Active product			
Installation elements	The product does not require any installation operations			
Use scenario	The product is in active mode 15% of the time with a power use of 3.3W and in stand-by mode 65% of the time with a power use of 2W and in sleep mode 20% of the time with power use of 0.7W for 10 years.			
Time representativeness	The collected data are representative of the year 2024			
Technological representativeness	The Modules of Technologies such as material production, manufacturing processes and transport technology used in the PEP analysis (LCA EIME in the case) are Similar and représentative of the actual type of technologies used to make the product.			
Geographical representativeness	Rest of the World			
	[A1 - A3]	[A5]	[B6]	[C1 - C4]
Energy model used	Electricity Mix; High voltage; 2018; India, IN	Electricity Mix; Low voltage; 2018; Thailand, TH	Electricity Mix; Low voltage; 2018; Thailand, TH	Electricity Mix; Low voltage; 2018; Thailand, TH
		Electricity Mix; High voltage; 2018; Asia Pacific, APAC	Electricity Mix; High voltage; 2018; Asia Pacific, APAC	Electricity Mix; High voltage; 2018; Asia Pacific, APAC
		Electricity Mix; Low voltage; 2018; Turkey, TR	Electricity Mix; Low voltage; 2018; Turkey, TR	Electricity Mix; Low voltage; 2018; Turkey, TR
		Electricity Mix; Low voltage; 2018; Taiwan, TW	Electricity Mix; Low voltage; 2018; Taiwan, TW	Electricity Mix; Low voltage; 2018; Taiwan, TW
		Electricity Mix; Low voltage; 2018; Spain, ES	Electricity Mix; Low voltage; 2018; Spain, ES	Electricity Mix; Low voltage; 2018; Spain, ES

Detailed results of the optional indicators mentioned in PCRed4 are available in the LCA report and on demand in a digital format - Country Customer Care Center - <http://www.schneider-electric.com/contact>

Mandatory Indicators		EasyLogic PM2230 Power and Energy meter LCD display, RS485, class 0.5S - METSEPM2230							
Impact indicators	Unit	Total (without Module D)	[A1 - A3] - Manufacturing	[A4] - Distribution	[A5] - Installation	[B1 - B7] - Use	[C1 - C4] - End of life	[D] - Benefits and loads	
Contribution to climate change	kg CO2 eq	1.31E+02	1.26E+01	2.08E+00	4.15E-02	1.15E+02	7.45E-01	-9.28E-02	
Contribution to climate change-fossil	kg CO2 eq	1.30E+02	1.25E+01	2.08E+00	4.15E-02	1.15E+02	7.44E-01	-9.16E-02	
Contribution to climate change-biogenic	kg CO2 eq	2.43E-01	1.10E-01	0*	0*	1.31E-01	1.25E-03	-1.20E-03	
Contribution to climate change-land use and land use change	kg CO2 eq	1.57E-04	1.56E-04	0*	0*	0*	1.15E-07	0.00E+00	
Contribution to ozone depletion	kg CFC-11 eq	3.62E-06	1.37E-06	1.83E-06	0*	4.25E-07	3.13E-09	-1.85E-08	
Contribution to acidification	mol H+ eq	6.98E-01	8.69E-02	8.54E-03	0*	6.01E-01	8.49E-04	-1.34E-03	
Contribution to eutrophication, freshwater	kg (PO4)3- eq	9.84E-05	4.35E-05	2.42E-07	2.15E-08	1.76E-05	3.70E-05	-1.70E-07	
Contribution to eutrophication marine	kg N eq	8.49E-02	1.01E-02	3.89E-03	2.87E-05	7.05E-02	2.94E-04	-5.89E-05	
Contribution to eutrophication, terrestrial	mol N eq	1.14E+00	1.07E-01	4.21E-02	3.04E-04	9.86E-01	3.15E-03	-6.83E-04	
Contribution to photochemical ozone formation - human health	kg COVNM eq	2.80E-01	3.55E-02	1.40E-02	7.08E-05	2.30E-01	8.13E-04	-2.87E-04	
Contribution to resource use, minerals and metals	kg Sb eq	2.40E-03	2.39E-03	0*	0*	2.72E-06	1.09E-06	-2.88E-05	
Contribution to resource use, fossils	MJ	2.07E+03	1.91E+02	2.57E+01	0*	1.85E+03	5.31E+00	-1.86E+00	
Contribution to water use	m3 eq	8.68E+00	3.96E+00	1.05E-01	1.34E-02	3.83E+00	7.69E-01	-8.31E-02	

Inventory flows Indicators		EasyLogic PM2230 Power and Energy meter LCD display, RS485, class 0.5S - METSEPM2230							
Inventory flows	Unit	Total (without Module D)	[A1 - A3] - Manufacturing	[A4] - Distribution	[A5] - Installation	[B1 - B7] - Use	[C1 - C4] - End of life	[D] - Benefits and loads	
Contribution to use of renewable primary energy excluding renewable primary energy used as raw material	MJ	1.82E+02	6.29E+00	0*	0*	1.76E+02	3.76E-02	-3.47E-02	
Contribution to use of renewable primary energy resources used as raw material	MJ	1.18E+00	1.18E+00	0*	0*	0*	0*	0.00E+00	
Contribution to total use of renewable primary energy resources	MJ	1.83E+02	7.47E+00	0*	0*	1.76E+02	3.76E-02	-3.47E-02	
Contribution to use of non renewable primary energy excluding non renewable primary energy used as raw material	MJ	2.07E+03	1.85E+02	2.57E+01	0*	1.85E+03	5.31E+00	-1.86E+00	
Contribution to use of non renewable primary energy resources used as raw material	MJ	6.02E+00	6.02E+00	0*	0*	0*	0*	0.00E+00	
Contribution to total use of non-renewable primary energy resources	MJ	2.07E+03	1.91E+02	2.57E+01	0*	1.85E+03	5.31E+00	-1.86E+00	
Contribution to use of secondary material	kg	5.43E-02	5.43E-02	0*	0*	0*	0*	0.00E+00	
Contribution to use of renewable secondary fuels	MJ	0.00E+00	0*	0*	0*	0*	0*	0.00E+00	
Contribution to use of non renewable secondary fuels	MJ	0.00E+00	0*	0*	0*	0*	0*	0.00E+00	
Contribution to net use of freshwater	m³	2.20E-01	9.42E-02	2.44E-03	3.13E-04	8.91E-02	3.39E-02	-2.37E-03	
Contribution to hazardous waste disposed	kg	4.53E+01	4.31E+01	0*	0*	2.02E+00	1.60E-01	-2.34E+00	
Contribution to non hazardous waste disposed	kg	1.99E+01	3.19E+00	2.11E-03	1.24E-01	1.64E+01	1.14E-01	-5.68E-02	
Contribution to radioactive waste disposed	kg	5.42E-03	1.43E-03	4.11E-04	0*	3.57E-03	6.62E-06	-2.63E-05	
Contribution to components for reuse	kg	0.00E+00	0*	0*	0*	0*	0*	0.00E+00	
Contribution to materials for recycling	kg	4.63E-02	3.92E-03	0*	0*	0*	4.23E-02	0.00E+00	
Contribution to materials for energy recovery	kg	0.00E+00	0*	0*	0*	0*	0*	0.00E+00	
Contribution to exported energy	MJ	2.90E-04	4.44E-05	0*	0*	0*	2.46E-04	0.00E+00	

* represents less than 0.01% of the total life cycle of the reference flow

Contribution to biogenic carbon content of the product	kg de C	0.00E+00
Contribution to biogenic carbon content of the associated packaging	kg de C	3.74E-02

Mandatory Indicators		EasyLogic PM2230 Power and Energy meter LCD display, RS485, class 0.5S - METSEPM2230							
Impact indicators	Unit	[B1 - B7] - Use	[B1]	[B2]	[B3]	[B4]	[B5]	[B6]	[B7]
Contribution to climate change	kg CO2 eq	1.15E+02	0*	0*	0*	0*	0*	1.15E+02	0*
Contribution to climate change-fossil	kg CO2 eq	1.15E+02	0*	0*	0*	0*	0*	1.15E+02	0*
Contribution to climate change-biogenic	kg CO2 eq	1.31E-01	0*	0*	0*	0*	0*	1.31E-01	0*
Contribution to climate change-land use and land use change	kg CO2 eq	0*	0*	0*	0*	0*	0*	0*	0*
Contribution to ozone depletion	kg CFC-11 eq	4.25E-07	0*	0*	0*	0*	0*	4.25E-07	0*
Contribution to acidification	mol H+ eq	6.01E-01	0*	0*	0*	0*	0*	6.01E-01	0*
Contribution to eutrophication, freshwater	kg (PO4)3- eq	1.76E-05	0*	0*	0*	0*	0*	1.76E-05	0*
Contribution to eutrophication marine	kg N eq	7.05E-02	0*	0*	0*	0*	0*	7.05E-02	0*
Contribution to eutrophication, terrestrial	mol N eq	9.86E-01	0*	0*	0*	0*	0*	9.86E-01	0*
Contribution to photochemical ozone formation - human health	kg COVNM eq	2.30E-01	0*	0*	0*	0*	0*	2.30E-01	0*
Contribution to resource use, minerals and metals	kg Sb eq	2.72E-06	0*	0*	0*	0*	0*	2.72E-06	0*
Contribution to resource use, fossils	MJ	1.85E+03	0*	0*	0*	0*	0*	1.85E+03	0*
Contribution to water use	m³ eq	3.83E+00	0*	0*	0*	0*	0*	3.83E+00	0*

Inventory flows Indicators		EasyLogic PM2230 Power and Energy meter LCD display, RS485, class 0.5S - METSEPM2230							
Inventory flows	Unit	[B1 - B7] - Use	[B1]	[B2]	[B3]	[B4]	[B5]	[B6]	[B7]
Contribution to use of renewable primary energy excluding renewable primary energy used as raw material	MJ	1.76E+02	0*	0*	0*	0*	0*	1.76E+02	0*
Contribution to use of renewable primary energy resources used as raw material	MJ	0*	0*	0*	0*	0*	0*	0*	0*
Contribution to total use of renewable primary energy resources	MJ	1.76E+02	0*	0*	0*	0*	0*	1.76E+02	0*
Contribution to use of non renewable primary energy excluding non renewable primary energy used as raw material	MJ	1.85E+03	0*	0*	0*	0*	0*	1.85E+03	0*
Contribution to use of non renewable primary energy resources used as raw material	MJ	0*	0*	0*	0*	0*	0*	0*	0*
Contribution to total use of non-renewable primary energy resources	MJ	1.85E+03	0*	0*	0*	0*	0*	1.85E+03	0*
Contribution to use of secondary material	kg	0*	0*	0*	0*	0*	0*	0*	0*
Contribution to use of renewable secondary fuels	MJ	0*	0*	0*	0*	0*	0*	0*	0*
Contribution to use of non renewable secondary fuels	MJ	0*	0*	0*	0*	0*	0*	0*	0*
Contribution to net use of freshwater	m³	8.91E-02	0*	0*	0*	0*	0*	8.91E-02	0*
Contribution to hazardous waste disposed	kg	2.02E+00	0*	0*	0*	0*	0*	2.02E+00	0*
Contribution to non hazardous waste disposed	kg	1.64E+01	0*	0*	0*	0*	0*	1.64E+01	0*
Contribution to radioactive waste disposed	kg	3.57E-03	0*	0*	0*	0*	0*	3.57E-03	0*
Contribution to components for reuse	kg	0*	0*	0*	0*	0*	0*	0*	0*
Contribution to materials for recycling	kg	0*	0*	0*	0*	0*	0*	0*	0*
Contribution to materials for energy recovery	kg	0*	0*	0*	0*	0*	0*	0*	0*
Contribution to exported energy	MJ	0*	0*	0*	0*	0*	0*	0*	0*

* represents less than 0.01% of the total life cycle of the reference flow

Life cycle assessment performed with EIME version v6.2.2, database version 2023-02 in compliance with ISO14044, EF 3.0 method is applied, for biogenic carbon storage, assessment methodology 0/0 is used

Please note that the values given above are only valid within the context specified and cannot be used directly to draw up the environmental assessment of an installation.

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Verifier accreditation N°	VH48	Information and reference documents	www.pep-ecopassport.org
Date of issue	09-2024	Validity period	5 years
Independent verification of the declaration and data, in compliance with ISO 14025 : 2006			
Internal	External	X	
The PCR review was conducted by a panel of experts chaired by Julie Orgelet (DDemain) PEPs are compliant with XP C08-100-1:2016 and EN 50693:2019 or NF E38-500 .2022 The components of the present PEP may not be compared with components from any other program. Document complies with ISO 14025:2006 "Environmental labels and declarations. Type III environmental declarations"			
			

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