- Easy installation, no wiring
- Interoperable
- Plug & Read
- Safe
- Economical solution

Application

Installations with complex access to the billing meter, such as the following applications:

Industrial installations: major energy consumers with meters sealed by the utility.

Small consumers: low consumption meters with only one communication port not accessible by the user.

Potential control devices: uses the energy value to implement a maximum demand control system.

Technical features

Power supply circuit	Power supply voltage	5...24 V_{dc}
	Consumption	< 0.5 W
Communications	Port	RS-232, RS-485
	Protocol	Modbus / RTU
Proportional digital output	Type	Transistor (Open NPN collector)
	Maximum voltage	24 V_{dc}
	Maximum operating current	50 mA
	Pulse duration	Configurable
Build features	Enclosure	V0 self-extinguishing plastic
	Protection degree	IP 41
	Weight (Sensor)	20 g
	Attachment system	Double adhesive Velcro strap
	Cable length	1.5 m
	Type of cable	Flat (8-way, 0.22 mm^2)
Mechanical features	Temperature	-15...+55 °C
	Relative humidity	5...95% (without condensation)
	Maximum altitude	2000 m
Standards	**EN 55022, EN 61000-4-11, EN 6100-4-2, EN 61000-4-3, EN 61000-4-4, EN 61000-4-5, EN 61000-4-6, EN 61000-4-8**	

References

Type	Code
ReadWatt	**M62311**

Accessories

Supplier PS 100...240 V_{dc}	Power supply voltage	100...240 V_{ac}
	Frequency	50 / 60 Hz
	Consumption	0.3 VA
	Output voltage	5 V_{dc}
	Maximum load	1 A
	Code	**M62331**

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Designed by: communication dept. - **CIRCUTOR**, SA.

Code: C2M673-01

Measurement and Control

ReadWatt

Optical pulse sensor for meter reading

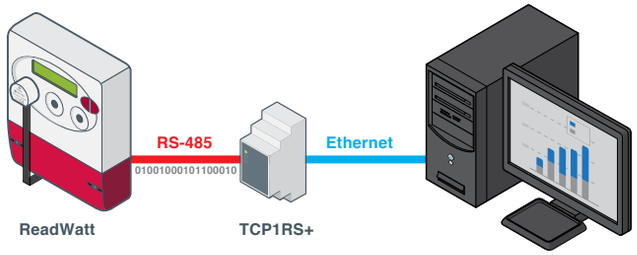
Reading without limits

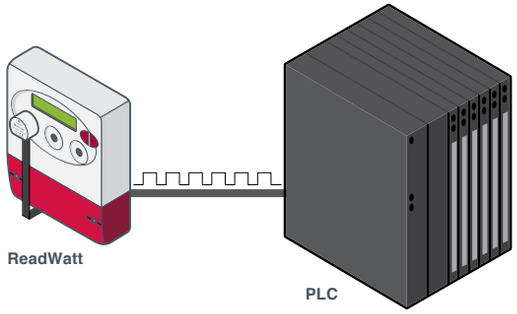
CIRCUTOR
Technology for energy efficiency

Optical pulse sensor for meter reading

ReadWatt is a digital optical converter, which has an pulse sensor, whose value can be queried by any Modbus/RTU communication master on the market. Its main features are as follows:

» Optical reader for capturing optical pulses from any energy meter
» RS-232 and RS-485 Modbus/RTU communications
» 1 digital proportional transistor output





Micro-power analyzer

Accesses all your meter's energy information without any type of electrical modification of your installation.

Interoperable

Works in any energy meter on the market that has an optical pulse emitter.

Plug & Read quick installation

Safe

Apart from quick and simple installation, **ReadWatt** is completely safe to install, because it does not require any type of electrical modification of the installation.

Reading without limits

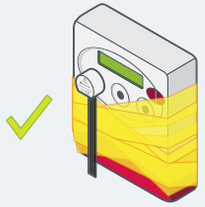
Active and Reactive

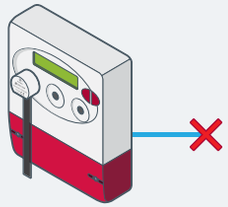
If your meter has an optical output proportional to the reactive energy, install a second **ReadWatt** sensor. In this way you can control in real time the cosφ value of your installation.

With **ReadWatt** you can extract information from your meter whatever happens:

Sealed meters

ReadWatt allows you to read meters that have been sealed by the utility or without accessing the communication port, only accessing the front panel of the unit.



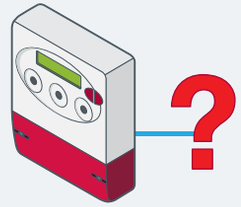


Meters with no communication port

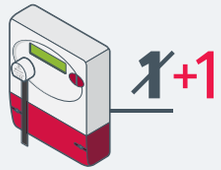
With **ReadWatt** you can equip your meter with a communication port to read energy data.

Energy meters with unknown protocol

It is usual for communications protocols to be complicated and costly to implement. It quickly and accurately accesses the unit's data.



Energy meters with only 1 communication port



Meters often only have 1 communication port, which is usually occupied by the utility. It manages your installation, and provides 1 communication port for the unit, installing **ReadWatt**.