



MEASUREMENT AND CONTROL

## Line-M

Impulse centralizer kits

# Integral & centralized management for all types of installations



As the world advances, it is increasingly important to thoroughly manage all of our installations. It is not only important for proper maintenance in order to avoid potential problems in the future, but it is also essential to apply the appropriate energy efficiency improvements.

The **line-M-201** devices round out the information managed by an Energy Management System (EMS), by tracking the consumption readings from meters that do not have a communications port, but rather feature integrated pulse probes. This allows us to centralize all the information in one system, making it ideal for managing an installation in accordance with **ISO 50001**.

Digital inputs not only provide energy consumption data, they also alert users to any alarm that may be triggered in the installation. This information is reported to the management software, which shows the status of any device or indicates if any protection and control device has been triggered.

# Monitor your consumption & identify installation problems

## Easily manage all your consumption

The **line-M-20I** solution is used to control digital inputs to read pulses from any type of utility supply, such as electricity, water, gas or other services, all in a single enclosure.

This makes the line-M devices the perfect solution to complement your Energy Management System (EMS) in accordance with the **ISO 50001** standard, monitoring and centralizing all the energy consumption of your installation in a single unit.



## Automation and management of inputs

The **line-M-20I** has 20 LEDs to quickly and visually identify the status of all the digital inputs, thus making it easier to monitor them. But if we give the device the ability to communicate, the possibilities multiply, since control signals can be sent to the management software, which can respond based on the settings programmed for each parameter. For example, to trip an electrical protection or activate some kind of sensor, such as when an electrical panel is opened.

# The most versatile range

20 digital inputs

40 digital inputs

Line bus

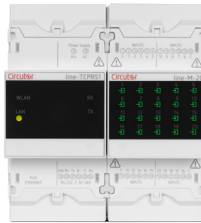
Ethernet + Wi-Fi

line-EDS  
(SGEI + Ethernet + Wi-Fi)

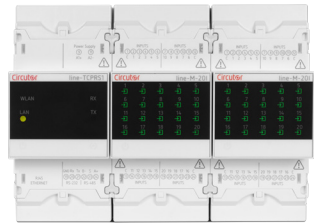
Circuitor SCADA system or PowerStudio



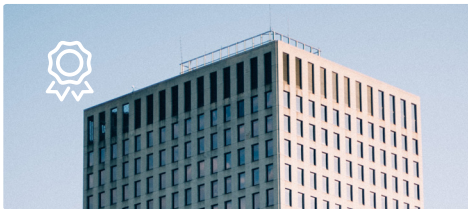
line-M-20I



Kit line-TCPRS1/M-20I



Kit line-TCPRS1/2xM-20I

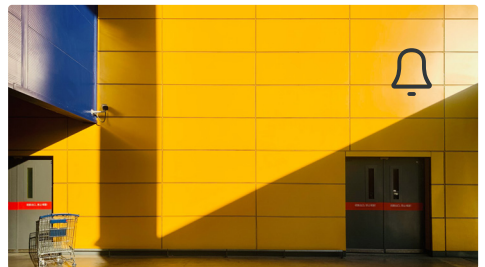


## Manage all your consumption as per ISO 50001

Digital inputs from line-M-20I devices let you build up data from electricity, water or gas meters that do not have communications. Use the digital output of any electrical meter or connect pulse probes, depending on the power source, to centralize all your consumption in one device.

## Detects any alarm

It detects the status of the sensors in your installation and sends an alarm signal, via communications, to the management and control software. Whenever there is a change in status due to a contact opening or closing, the device will send a signal to report the change and act if necessary.

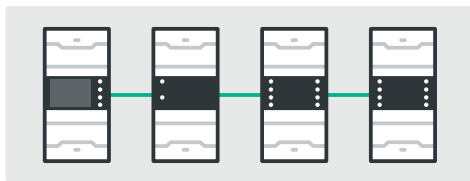


## Easily interpret the status of sensors

It detects the status of each sensor to quickly determine if an alarm is active or not. The **line-M-20I** devices have 20 or 40 front LEDs that light up depending on the status of each input, making it easier to detect an alarm at a glance.

## Wireless communications configuration

The device can be connected using the **MyConfig** app without having to access the electrical panel, for faster start-up.



## Automatic detection via the **line** system

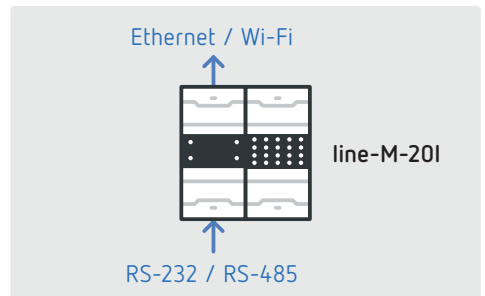
The **line-M-20I** module is part of the Line System, so it has a side bus, line bus, to physically connect to the **line-EDS** datalogger via RS-485 without the need for communications or power wiring. This module is detected by the line-EDS without having to program anything, making it easy to manage and providing Wi-Fi and Ethernet communications.

## Save on wiring, Wi-Fi communications

The kits gateway that is already connected, providing them with Ethernet and Wi-Fi communications. By linking devices directly to the router via Wi-Fi, it reduces installation costs.

## Keep the data from your existing meters

If you have existing meters with energy logs, the **line-M-20I** lets you manually enter the initial value from which it will start counting, thus ensuring that the record of consumption is not lost.

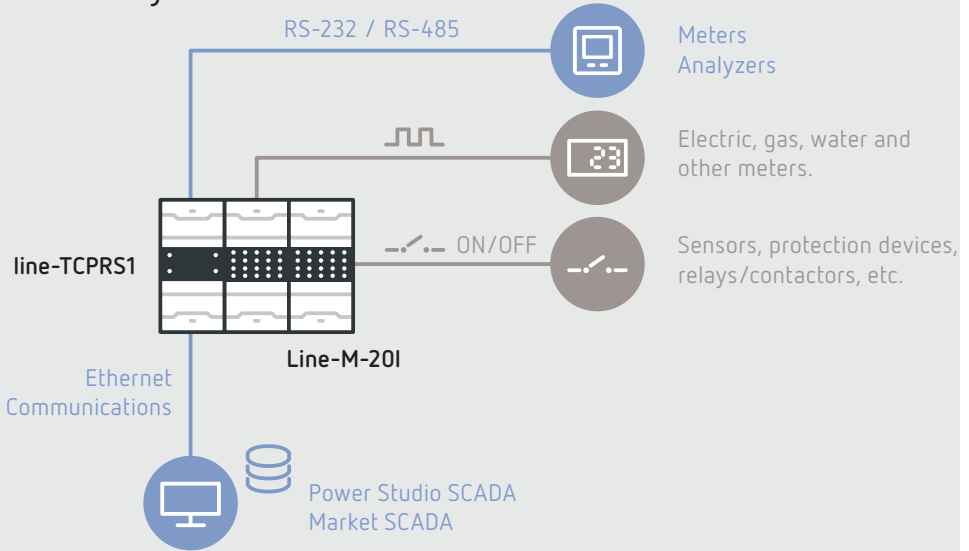


## Integrated RS-485/Ethernet gateway (line-TCPRS1)

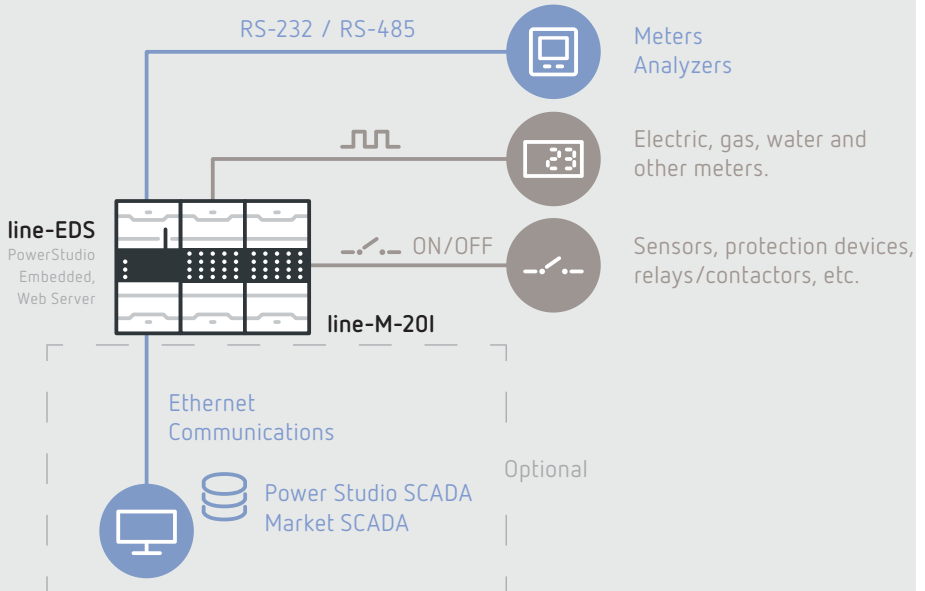
The kits have an RS-232/RS-485 (Modbus RTU) to Ethernet/Wi-Fi (Modbus TCP) gateway that allows up to 32 peripherals, such as electrical meters, power analyzers or other devices, to be connected to the management and control software.

# Management and control in a single kit

## SCADA System



## EMS



# Record all your consumption and receive invoice simulations

Thanks to their Ethernet and Wi-Fi communications, the **line-TCPRS1/M-20I** and **line-TCPRS1/2xM-20I** kits are perfect for integration into an energy management system (EMS), since all the data recorded at the digital inputs can be sent directly to the **PowerStudio SCADA** management software.

When these devices are connected to **PowerStudio SCADA**, you will be able to process the data from the entire installation to automatically generate and send simulations of electrical bills.

By using **PowerStudio SCADA**, you can monitor any installation in real time, make graphs and tables to analyze consumption trends for each customer, create SCADA screens to manage each meter or contract, export the data or receive invoice simulations in your email to simplify the billing process.

## Applications



## References

Model	Code	STM-S	Digital inputs	Communications	Protocol
line-M-20I	M58E06.	3	20	Bus-line (RS-485)	Modbus RTU
Kit line-TCPRS1/M-20I	M62510.	6	20	Ethernet / Wi-Fi	Modbus TCP / TCP / UDP
Kit line-TCPRS1/2xM-20I	M62520.	9	40	Ethernet / Wi-Fi	Modbus TCP / TCP / UDP

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