

Gecko

smart 3

infitech

Safety Precautions

	Instruction manual	Refer to the instruction manual before handling
	Risk of electrical contact	Risk of electrocution. It is recommended to disconnect from the AC mains before handling.
	Wiring with safety ferrules.	Use to prevent unwanted contact with the wiring.
	Do not spill any liquids.	Equipment not protected against liquids.
	Protective cover	Place the protective cover included with the electrical panel after installation.
	Thermal-magnetic circuit breaker.	Thermal-magnetic circuit breaker upstream of the equipment (see figs.).

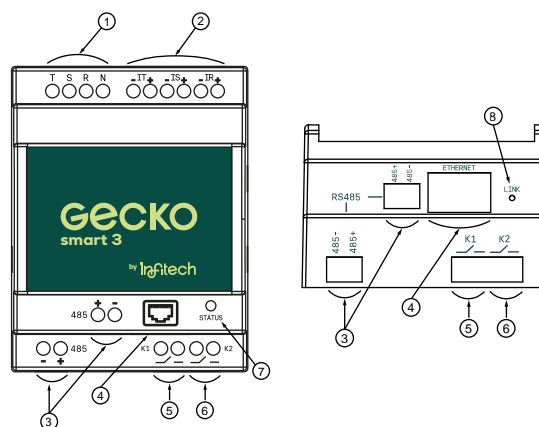


Características

Nominal power	230 V _{RMS}
Max. power supply fluctuation	±20%
Maximum power consumption	<3.2 W
Measurement range shunt i_{ac}	0-20A _{RMS}
Current transformer type	XXX/5A _{RMS}
Voltage measurement range V_{ac}	100-542V _{RMS}
Dry Contacts max. current	2A _{RMS}
Dry Contacts máx. voltage	24V _{dc}
Number of dry contacts	2
Communications	RS485, Ethernet y WiFi
Protocols (Modbus)	RTU/TCP
Maximum cable size AC	3mm ²
Ethernet speed	10/100 Mbps
Wireless network band	2.4GHz
Overvoltage category	CAT III

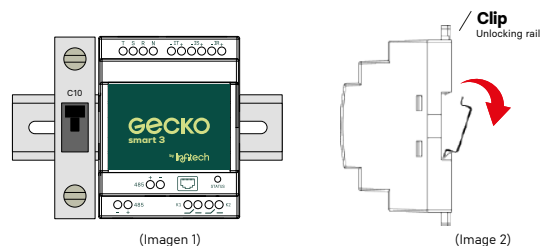
Part description

1	Connection to the AC mains (N-R-S-T)
2	Current transformers connection
3	RS485 Bus
4	Ethernet connection
5	Dry contact K1
6	Dry contact K2
7	Status LED indicator
8	Link push button. Wifi setup and device reset



Installation

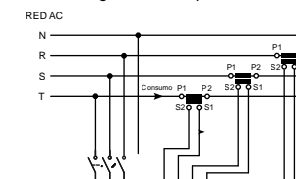
- 1 The equipment is ready to be installed on DIN rail as shown in Figure 1
- 2 To remove it from the rail, you need to pull up the clip on top Image 2



- 3 The equipment must be equipped with magnetothermal protection. They must also comply with local regulations (Figure 1)
- 4 The line and the neutral of the network must be connected in the way shown in Figure 1. For current measurements, current transformers must be installed according to the sign criterion indicated, for a correct measurement of the power flow.

- 5 For current measurement, current transformers -/5A (CT) should be used. The sign criterion shown in Figure 3 for connecting the CT (or the CT manual) must be followed, for a correct measurement of power flow.

It can work in both three-phase and single-phase networks by measuring three independent circuits.



NOTE

The equipment is powered from the AC mains using N and phase R, so at least the voltage of that phase must be connected always in order for it to work.

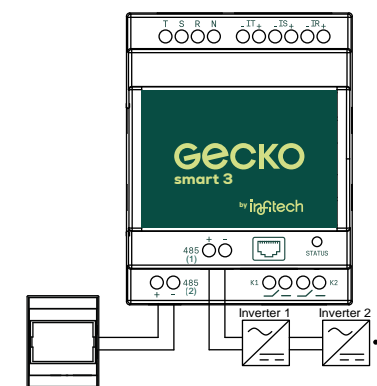
If circuits are monitored in a single-phase network, the voltage input corresponding to that circuit (S or T) must also be connected to the phase.

Communications

RS485

The equipment has two independent RS485 buses. In RS485-1, the computer works as a Master, and can hang any number of slaves from that bus. The second RS485-2 bus implements a Modbus RTU server, in which the computer is slave and receives queries from a Master.

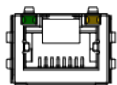
In the GECKO smart 3, the + and - terminals of the bus are indicated, usually corresponding to the notation A and B, respectively, on some devices. Various equipment with RS485 bus can be connected (Modbus RTU): meters, other GECKO devices, inverters for data reading and control (anti-spill, power control, on/off)



LAN - TCP/IP

The equipment has wifi (2.4GHz) and RJ45 for Ethernet. It can be connected by either way, although it is recommended to use Ethernet wherever possible.

To establish the connection via ethernet, simply connect an RJ45 cable from a router or switch directly to the computer and it will connect automatically. The LEDs on the RJ45 connector indicate the connection status.



Green led

It turns on continuously, indicating that the computer has established a connection to the network.

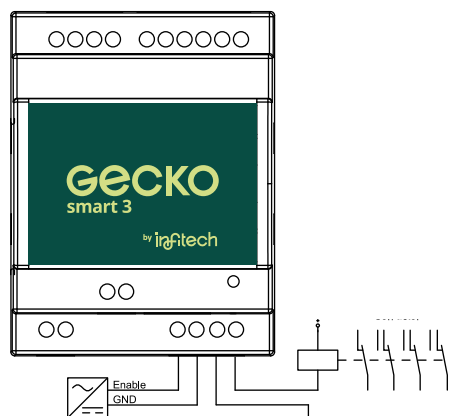
Yellow led

Blinks when there is data traffic, with a frequency that depends on the level of data transfer. If it never turns on, there is no data traffic, and the computer may not be getting an IP address and connecting to the network correctly.

Connection of relay outputs

The equipment has two potential-free outputs (relays). The following figure shows two examples of use:

- **The K1 contact** is used to connect to a control input of an inverter, to manage its on/off in an anti-spill system.
- **In the case of K2**, it is used to activate a load, such as the activation coil of a contactor. It is recommended, in case of handling a high load, to always use an external power relay or contactor, activated from the GECKO.



States indicated led: STATUS

LED	LEVEL OF ALERT	STATE	DESCRIPTION
★ ★ ★	No alert	Normal	Normal operation. Connected to the cloud and no alerts.
★	Error	No started	Device is powered ON but it is not active.
★ ★ ★	Info	Link mode	Device is in link mode, waiting for wifi setup.
★ ★ ★	Warning	No connection	The device is working but it has no connection with the cloud
★ ★ ★	Info	In reset	Reset process is in progress

Wifi network connection

- 1 Open Gecko App Installer, click on "Connect to WiFi" and then on "Connect".
- 2 In the list of networks that appears, connect to gecko-XXXX, where XXXX comes in the tag of the computer. Enter the password that also appears on the label. Go back, back to the App.
- 3 Select the network you want to connect to and enter the password.
- 4 Press connect and wait for the confirmation window to turn green.



In the event of a computer crash and downtime, the following process should be carried out to restore the equipment to its original factory state:

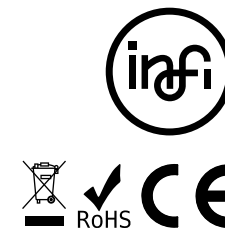
1. Disconnect the power.
2. Press and hold the link button
3. Turn on the computer (do not release the button)
4. When the LED blinks red (see status table), release the button and wait for the computer to start normally (LED doing orange sweep)



NOTE

For more information about the wireless connection, refer to the Gecko User Manual.

If you need technical assistance, please contact **Infitech** by e-mail info@infitech.es



Gecko

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