

# PROGRAMMABLE LOGIC RELAYS

The unique new 8A Series of PLRs from Finder and Arduino

## OPTA



# ABOUT US



Finder was founded in Italy in 1954. Since then it has been designing and manufacturing a wide range of electromechanical and electronic components for both the residential and industrial sectors.

Today, thanks to its global vision, Finder now distributes its products around the world through a network of 29 company-owned subsidiaries and more than 80 trade partnerships.

Finder is an international family made up of more than 1300 individuals, all united by the same values and passion for our products.



## 14 500

Different products to satisfy a myriad of applications. From products at the heart of automation to the control of machines, power, time, temperature, liquid level, light and much more.

OUR PRODUCTS CARRY MORE CERTIFICATIONS THAN ANY OTHER RELAY MANUFACTURER



FINDER IS AN ITALIAN BRAND WITH A WORLDWIDE PRESENCE

- 4** PRODUCTION PLANTS IN EUROPE
- 29** SUBSIDIARIES
- +80** OFFICIAL DISTRIBUTORS



# WHAT IS FINDER OPTA?



## OPTA

### PROGRAMMABLE LOGIC RELAYS 8A Series

A range of simple and self contained **PROGRAMMABLE LOGIC RELAYS** perfect to create simple applications in industrial automation, OEM and building automation sectors.

Programmable both with a traditional language IEC 61131-3 (Ladder) as well as with an innovative and open source language (IDE / ARDUINO).

Made in ITALY by Finder, it combines Finder's industrial experience with ARDUINO's technological innovation, for a truly **unique product**.

## OPTA

### PROGRAMMABLE LOGIC RELAYS 8A Series

## UNIQUE IN THE MARKET

**FINDER OPTA** is the first ever **PROGRAMMABLE LOGIC RELAY**.

Drawing on Finder's world class manufacturing capability and the ARDUINO innovative platform has resulted in a truly unique range of products.

## MADE IN ITALY

Created in partnership with ARDUINO, the OPTA range was designed and is manufactured and tested in Finder's Headquarters in Almese, ITALY.

**FROM THE IDEA TO  
THE FINISHED PRODUCT.**



**OPTA**

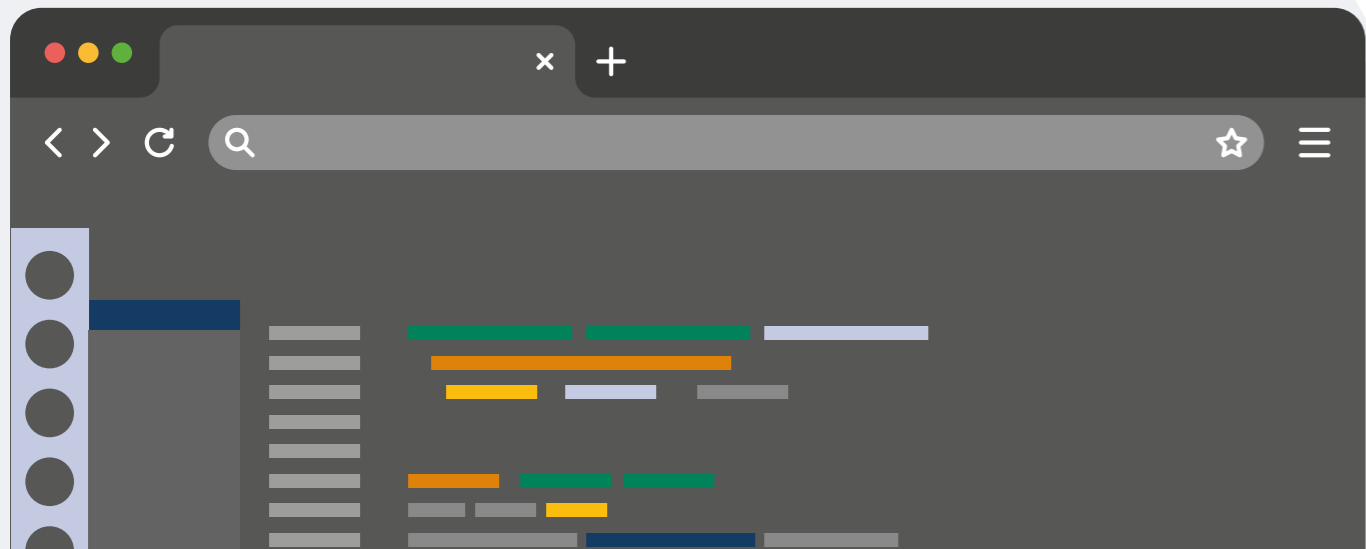
PROGRAMMABLE LOGIC RELAYS  
8A Series



**TECHNOLOGICAL  
PARTNER**

Millions of users and thousands of companies use Arduino as an innovation platform

Arduino has drawn on their experience in frictionless design to enable enterprises to quickly and securely connect remote devices to business logic within one simple IoT application development platform.



**OPTA**

PROGRAMMABLE LOGIC RELAYS  
8A Series

## THE ARDUINO PLATFORM OFFERING



OPEN SOURCE and LICENSE FREE for all.



+39 million downloads per year.



+4,000 official libraries available on the platform, for all kinds of applications.



+1 million active users on the Arduino forum and community.

# OPTA

PROGRAMMABLE LOGIC RELAYS  
8A Series

## COMMUNICATION PROTOCOLS



8 inputs and 4 outputs



Ethernet



USB (type C port)

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PROGRAMMABLE LOGIC RELAYS  
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## THE UNIQUE NEW PROGRAMMABLE LOGIC RELAY



### POWERFUL

The powerful dual-core Cortex® M7+M4 chip allows a large number of computing operations in real time. Ideal for predictive maintenance applications.



### CONNECTED

Thanks to the RJ45 port, the USB (type C port), RS485 and WiFi/BLE integrated module.



### SECURE

Thanks to an high end integrated secure element chip to manage encryption and data keys in all kinds of applications.



### OPEN SOURCE

Programmable with OPEN SOURCE, LICENCE FREE software (IDE ARDUINO) as well as IEC 61131-3 languages (LADDER, FBD).



### EASY

Designed to simplify the interaction between electronic devices and the physical world, empowering all your projects.

# OPTA

PROGRAMMABLE LOGIC RELAYS  
8A Series

## WHY IS IT UNIQUE?

- Ultra secure connectivity at the hardware level thanks to onboard secure element chip
- Perform secure OTA (Over-The-Air) firmware updates
- Reliable and durable by design, thanks to Finder's 65+ years industrial expertise in relay manufacturing
- Leverage of a vast availability of ready-to-use software libraries and Arduino sketches
- Support of standard secondo IEC 61131-3 PLC languages (LD - Ladder Logic Diagram and FBD - Function Block Diagram, among others)
- Modbus TCP connectivity via Ethernet or Modbus RTU via dedicated RS485 terminal
- Onboard smart connectivity options (Ethernet/Wi-Fi/Bluetooth® Low Energy)
- Real-time remote monitoring via intuitive Arduino IoT Cloud dashboards (or third-party services)



# OPTA

PROGRAMMABLE LOGIC RELAYS  
8A Series

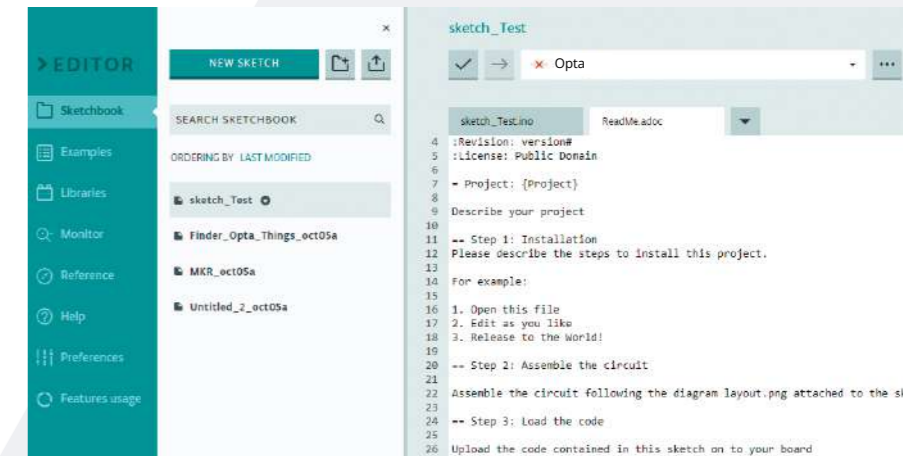
## ALL THE PROGRAMMING LANGUAGES YOU NEED

### FREE - WITHOUT LICENCES

Using ARDUINO IDE,  
the Open-Source Arduino Software

### LICENSED - TRADITIONAL

Using LADDER, FBD or other traditional  
IEC 61131-3 languages



## A SUPER POWERFUL PROCESSOR

### PROCESSOR ST dual-core Cortex® M7+M4

Super fast real time processing to manage calculations for predictive maintenance and updates OTA (Over-The-Air)

### CRYPTO CHIP

Enhanced IoT security thanks to onboard secure element chip

*designed  
for cyber  
security*

# OPTA

## PROGRAMMABLE LOGIC RELAYS 8A Series



# OPTA

## PROGRAMMABLE LOGIC RELAYS 8A Series

### THE RANGE

#### LITE



##### Type 8A.04.9.024.8300

- Supply 12...24 V DC
- 8 Digital/Analog (0-10V) input
- 4 NO relay output contacts, rated 10 A
- USB (type C) High Speed port for:
  - Programming and Power delivery
  - Data logging (via memory stick)
- RJ45 for Ethernet connections or MODBUS TCP/IP

#### PLUS

+ RS485



##### Type 8A.04.9.024.8310

- Supply 12...24 V DC
- 8 Digital/Analog (0-10V) input
- 4 NO relay output contacts, rated 10 A
- USB (type C) High Speed port for:
  - Programming and Power delivery
  - Data logging (via memory stick)
- RJ45 for Ethernet connections or MODBUS TCP/IP
- RS485 Port for MODBUS RTU connection

#### ADVANCED

+ WIFI and BLE



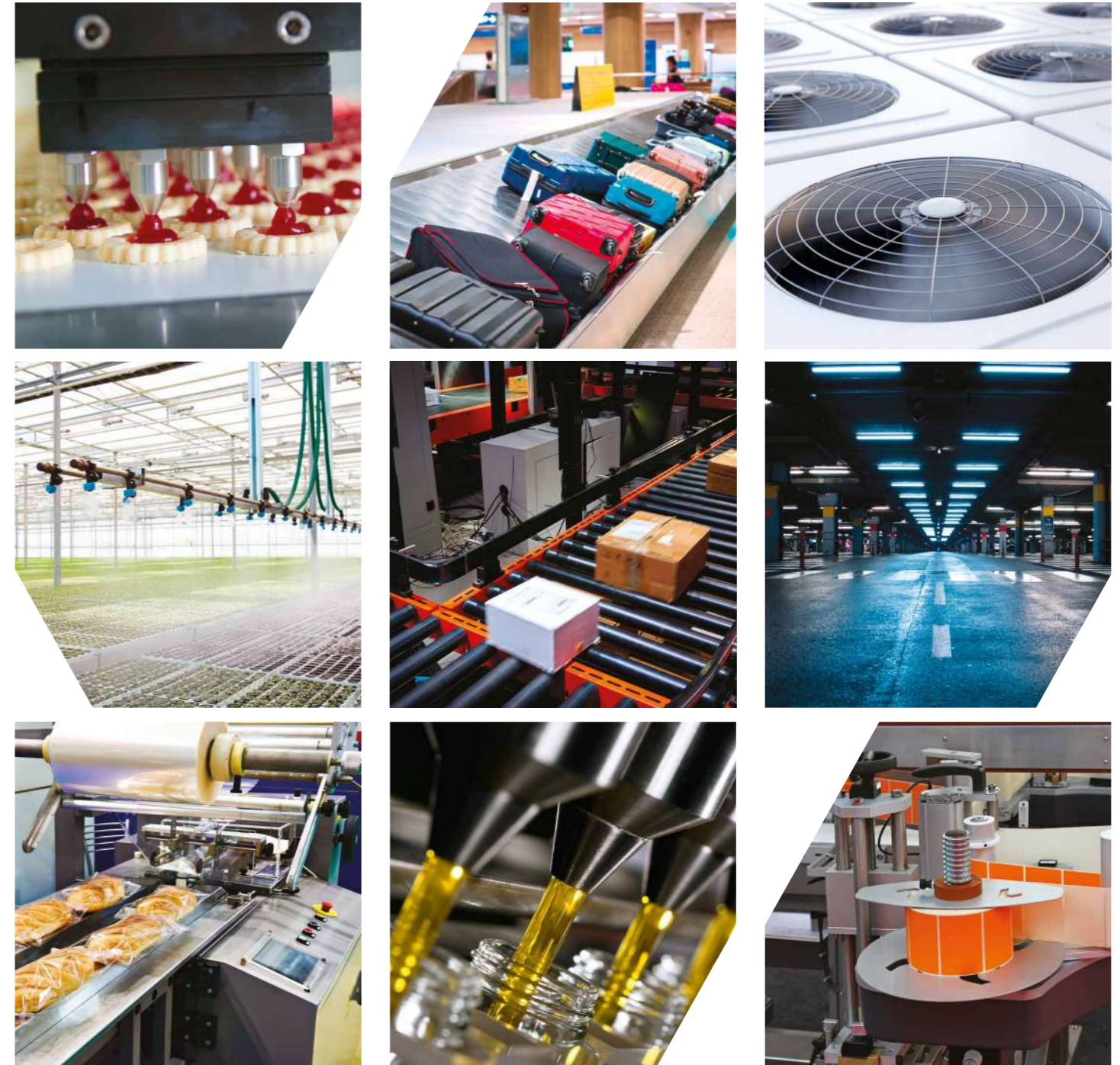
##### Type 8A.04.9.024.8320

- Supply 12...24 V DC
- 8 Digital/Analog (0-10V) input
- 4 NO relay output contacts, rated 10 A
- USB (type C) High Speed port for:
  - Programming and Power delivery
  - Data logging (via memory stick)
- RJ45 for Ethernet connections or MODBUS TCP/IP
- RS485 Port for MODBUS RTU connection
- WIFI/BLE integrated module

## A WIDE RANGE OF APPLICATIONS

Customer need	Target	Benefits
<b>Boost Production Automation through secure Industry 4.0 control system</b>	<ul style="list-style-type: none"> <li>• Manufacturing plants</li> <li>• Machinery operations</li> <li>• Industrial automation</li> <li>• Utilities</li> <li>• Logistic hubs</li> </ul>	<ul style="list-style-type: none"> <li>• Remote programming and operation</li> <li>• Productivity improvement</li> <li>• Arduino Implementation easiness and code portability</li> <li>• Updating to Industry 4.0 capability for industrial equipment</li> <li>• Process and cycle time optimization with minimised field returns</li> <li>• KPI tracking, accurate data logging</li> <li>• Enforce security through X.509 certificates</li> <li>• Retrofit existing installations with minimal effort</li> </ul>
<b>Smart and reliable management of electrical loads</b>	<ul style="list-style-type: none"> <li>• Airports</li> <li>• Shopping malls</li> <li>• Exhibitions</li> <li>• Underground city parkings</li> <li>• Facilities management professionals</li> <li>• Smart Cities infrastructure providers</li> <li>• Smart parking</li> <li>• Corporations</li> </ul>	<ul style="list-style-type: none"> <li>• Intelligent optimisation of energy management and power consumption</li> <li>• Automated security lighting</li> <li>• Improved user experience</li> <li>• Enhanced security by adding access control</li> <li>• Speedier access authorisation process</li> </ul>
<b>Improved comfort and quality of life in the home and industrial buildings</b>	<ul style="list-style-type: none"> <li>• HVAC systems</li> <li>• Industrial air conditioning/chilling</li> <li>• Home automation</li> <li>• Smart buildings</li> </ul>	<ul style="list-style-type: none"> <li>• Ease of initial implementation and of ongoing upgrades</li> <li>• Attractive dashboard design</li> <li>• Alarms setting</li> </ul>

## A WIDE RANGE OF APPLICATIONS







FINDER S.p.A. sole proprietorship  
Via Drubiaglio, 14 - 10040 ALMESE (TO) ITALY  
tel +39 011 9346211 - export@findernet.com

[findernet.com](http://findernet.com)

