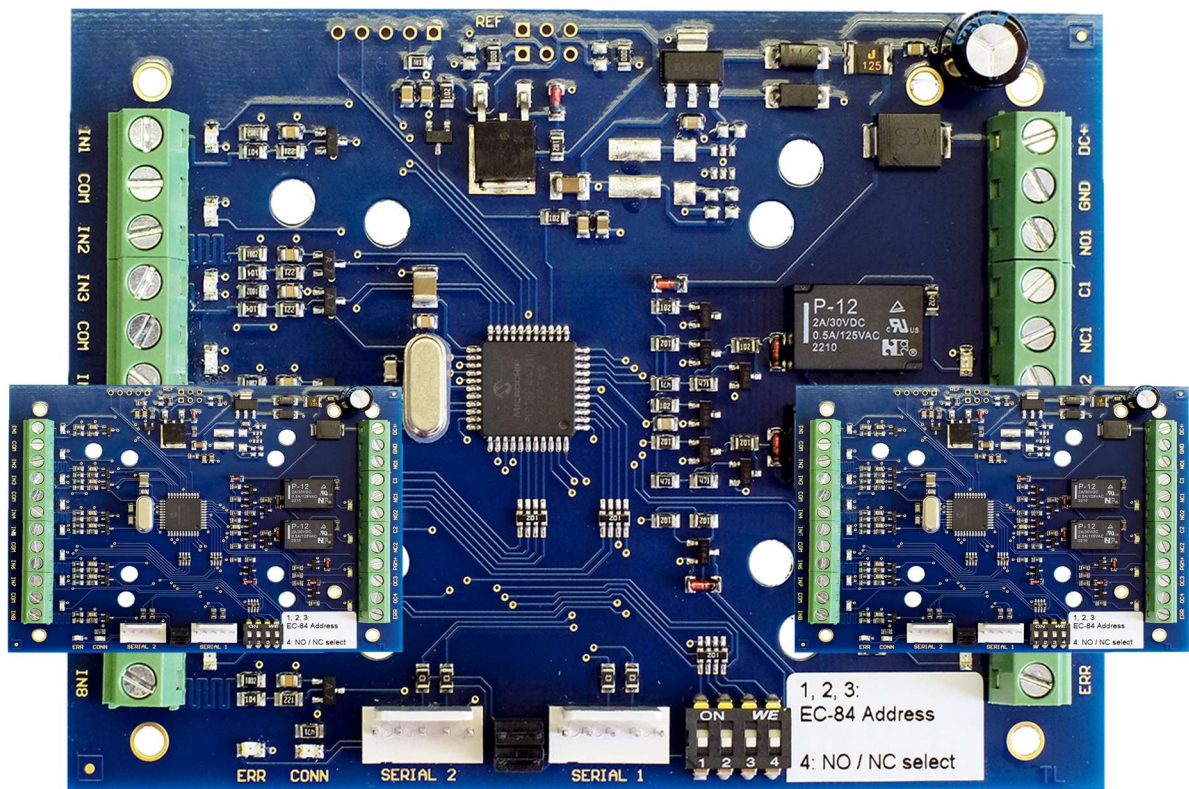


# EC-84

## I/O Expansion Module for EniCom communicators



**INSTALLER MANUAL**

## TABLE OF CONTENTS

1. DESCRIPTION .....	3
2. SYSTEM STRUCTURE.....	3
3. MODULE BUILD UP.....	4
4. LED SIGNALS .....	5
5.PROGRAMMING.....	6
5.1 ENICOM Tool.....	6
5.2 INPUT TYPES .....	6
6. TROUBLESHOOTING .....	7
7. TECHNICAL DATA .....	7
DECLARATION OF CONFORMITY .....	8

## 1. DESCRIPTION

The EC-84 output and input extension modules provide 8 additional inputs and 4 programmable outputs when connected to ENICOM communicators. The inputs support NO and NC operation with a terminating resistor.



In order to use the functions as widely as possible, please read the *Installer's Guide* carefully.



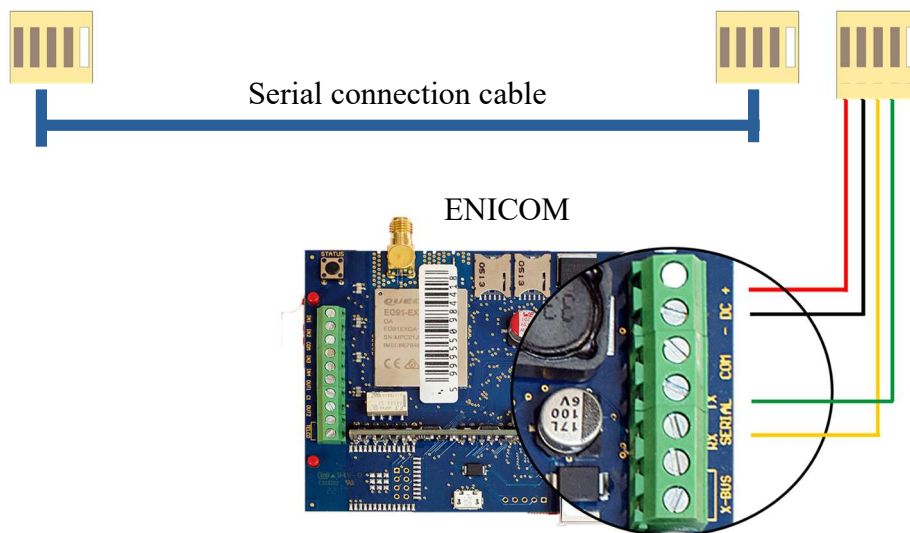
In order to program and use the device safely, follow the instructions in the *Installer's Guide* during installation, paying particular attention to the safety regulations.

## 2. SYSTEM STRUCTURE

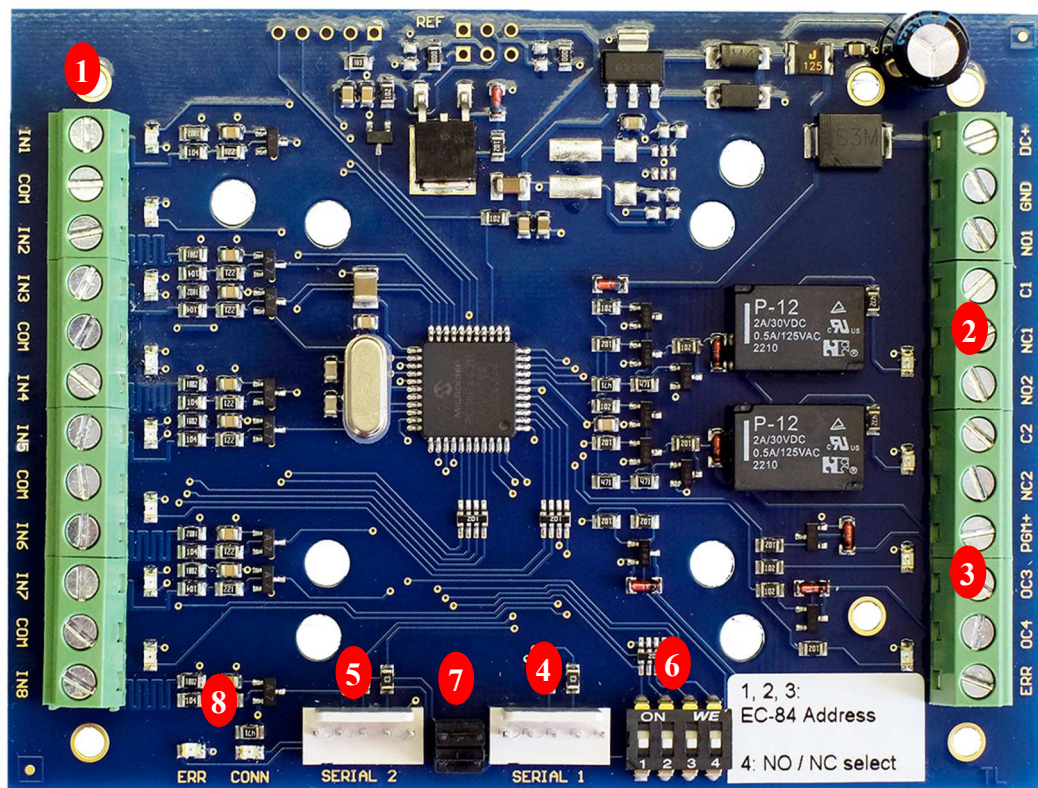
The first EC-84 extension module must be connected to the corresponding terminals of the ENICOM communicators (power +-, rx, tx). As required, up to eight EC-84 modules can be used in a system, properly connected in series.

2. EC-84

1. EC-84



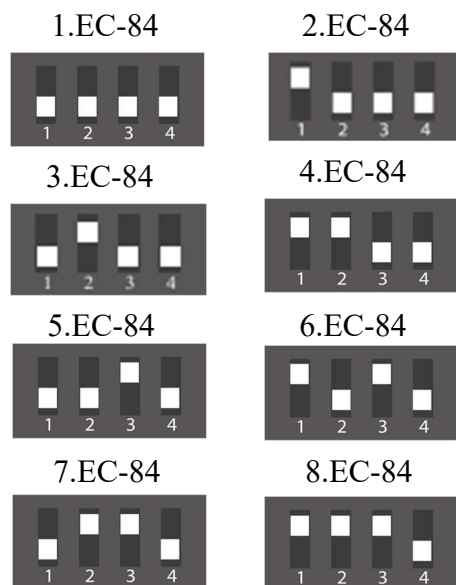
### 3. MODULE BUILD UP



- 1** Input terminals and indicator LEDs (1-8)
- 2** Relay outputs and indicator LEDs (1-2)
- 3** Open collector outputs and indicator LED-ek (3-4)
- 4** Primary serial port connector
- 5** Secondary serial port connector
- 7** Serial port jumpers
- 8** Operation indicator LEDs

**6** Program switch

Module address can be set with the first three switches.



## 4. LED SIGNALS

### Input indicator LEDs

The input indicator LEDs indicate the status of the respective inputs according to the current configuration (EOL).

<i>No light</i>	The input is inactive (closed)
<i>Light</i>	The input is active (open)
<i>Flashing</i>	Input tamper (short circuit/break, in EOL mode)

### Output indicator LEDs

The output indicator LEDs indicate the current status of the respective outputs. In the case of relay outputs, this means: NC status.

<i>No light</i>	The output is inactive
<i>Light</i>	The output is active

### Operation indicator LED

They indicate the proper operation and malfunction of the device.

<i>Conn LED flash</i>	Operation is fine
<i>ERR LED flash</i>	Communication problem, wiring/programming is not correct



If the ERR LED is flashing, it is definitely necessary to check the programming of the ENICOM communicator.

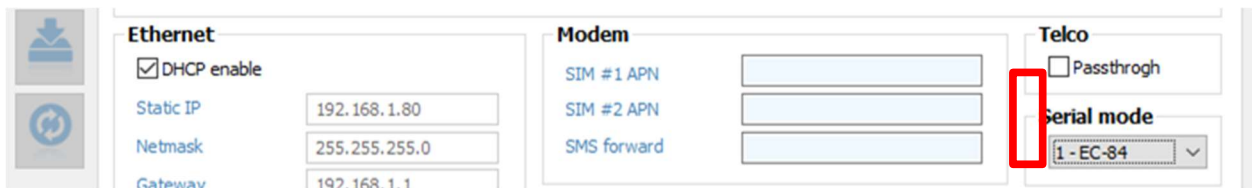
## 5.PROGRAMMING



Use the ENICOM Tool software to program the expansion module. You can set the addressing of the module and the selection of the input type by setting the program switch.

### 5.1 ENICOM Tool

To set up the serial communication of the module, start the software and connect the ENICOM communicator via USB (requires power supply), then set in the "Settings" window to "EC-84" mode.



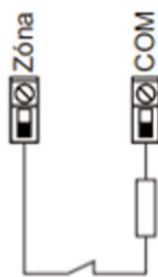
ENICOM Tool „Settings”

### 5.2 INPUT TYPES

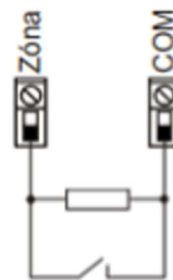
The mode of the inputs of the EC-84 expansion module can be set with the 4th program switch as follows:

#### NO/NC terminating resistor (EOL)

When program switch 4 is off, the inputs are of the normally closed (NC) type, i.e. the inactive state of the input is the closed state, while the active state corresponds to the open state. When the program switch is on, the operation of the inputs changes to the normally open (NO) type.



Normally closed contact with terminating resistor (NC/EOL)



Normally open contact with terminating resistor (NO/EOL)

## 6. TROUBLESHOOTING

**SYMPTOM:** Communicator does not seem to poll the module correctly, ERR LED is flashing.

**SOLUTION:** Check wiring on ENICOM and serial cable connection on EC-84. Check serial communication settings (ENICOM Tool software), and also the adequate DIP witch for module addresses. In case of using more modules, serial port jumpers must be closed.

**SYMPTOM:** Communicator seems to poll the module correctly, but the change of input status is not sent to the CMS central correctly.

**SOLUTION:** Check the programming of the communicator. Check if a proper event code is added for the inputs – when there is no code set, it disables reporting the input to the CMS.

## 7. TECHNICAL DATA

Product	EC-84
Supply Voltage	10,5 – 28,0 Vdc
Standby Current	10 mA
Max Current Load	80 mA
Inputs / Outputs	8 / 4
Output type / Max Load	2 x Relé – NO/NC @ max. 1 A 2 x Open kollektor / max. 50 mA
Operating Temperature	-10 °C / 50 °C
Size (W / L / H)	80 x 110 x 22 mm
Weight	50 g

**DECLARATION OF CONFORMITY**

The **EC-84** I/O expansion module complies with the following guidelines:

<b>2014/30/EU</b>	Electromagnetic compatibility
<b>2014/35/EU</b>	Low-voltage device safety
<b>1999/05/ECC</b>	R&TTE directive
<b>2011/65/EU</b>	RoHS2 directive

The EC-84 I/O extension module complies with the requirements of these EU directives based on the following standards:

<b>EN 61000-6-3:2001 EMC</b>	General emission standard, commercial and domestic
<b>EN 50130-4:2011</b>	Immunity, environmental class I.
<b>EN 50136-1:2012</b>	Alarm transmission equipment
<b>EN 60950-1:2006+A12:2011</b>	Security of information technology devices, general requirements
<b>TBR 21, ETSI EN 300 001</b>	PSTN communication

The product has a **CE** conformity mark.

