

# Quick Installation Guide

RIO 425

P/N 1500443



## What's in the Box?

1. RIO 425 AC Generator Interface
2. 120 Ohm Resistor
3. Quick Installation Guide



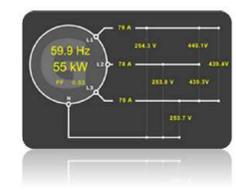
### Caution!

Handle with care when opening the bag and installing the unit.

## User Interface Basics

### Instrument Page

When connected and configured the DCU engine panel can display this power measurement instrument page.



### Note!

It is recommended to configure the unit using the web-interface at the DCU Engine Controller. However, this product has a local user interface briefly explained below:

### Configuration

Press the configuration key for 3 seconds to enter the Setup menu. Press the same key to modify configuration values.



### Left Cursor

Move left/down for digits and items.



### Right Cursor

Move right/up/next for digits/items or continue to the next step.



For further details and information, please see the **Installation Manual**.

## Highlights

- Phase/L1-L3 up to 520 VAC
- Phase/N up to 300 VAC
- Phase currents (A)
- Frequency (Hz)
- Power factor
- Total power (kW)
- Local Display
- Configurable
- Power supply 100-240 VAC
- Modbus RTU/RS-485

## Specifications

### Measurements

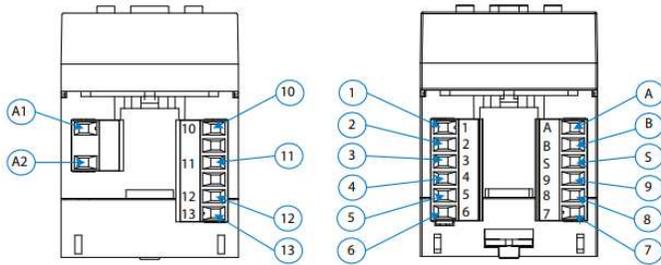
| Section | Width | Height | Depth | Unit |
|---------|-------|--------|-------|------|
| Size    | 52.5  | 118    | 70    | mm   |

### Power Ratings

| Section      | Min | Typ. | Max | Unit |
|--------------|-----|------|-----|------|
| Power Supply | 100 | 230  | 240 | VAC  |

Maximum power consumption 4 VA.

### Terminal Connectors



A1: Power Supply  
A2: Power Supply

10: VL1, voltage input L1  
11: VL2, voltage input L2  
12: VL2, voltage input L3  
13: N, Neutral voltage input

1: S1, current input L1  
2: S2, current input L1  
3: S1, current input L2

4: S2, current input L2  
5: S1, current input L3  
6: S2, current input L3

A: A+, RS-485  
B: B-, RS-485  
S: S, GND for RS-485 and digital inputs

9: I1, Digital input 1 or selection rate  
8: O1, Digital output 1  
7: CO, Common digital outputs

## Responsibilities

It is the sole responsibility of the installer to ensure that the installation work is carried out in a satisfactory manner and meet all applicable rules and regulations.

## Installation

1. Wire all external connections to the RIO 425 AC Generator Interface Module:
  - \* Power Supply
  - \* Communication to the DCU
  - \* Generator Voltage Interface
  - \* Generator Current Interface
2. For protection, use an external 2 A fuse.
3. The RIO 425 is by default preconfigured for communication with an Auto-Maskin DCU (200- or 400 Series) using the RIO Link terminal S(GnD), B(L) and A(H). Make sure the communication link is correctly terminated using the submitted 120 Ohm resistor.
4. Observe that the minimum wire requirements are followed for the voltage interface (16 AWG) and current interface (12 AWG).

For further details and information, please see the **Installation Manual**.

### Note

Auto-Maskin continuously upgrades its products and reserves the right to make changes and improvements without prior notice.

## Configuration

The preferred configuration method for the RIO 425 is via the DCU web server menu:

Home > RIO > RIO 425.

- Primary voltage
- Secondary voltage
- Primary current

Synchronize the configuration.

Alternatively, the local user interface can be used for configuration.

Configure the desired sensors in the DCU. Press Submit when complete.

- Voltage phase L1-L3
- Current phase L1-L3
- Power factor
- Frequency
- Active/Inductive/Capacitive/Reactive/ Apparent Power
- Voltages L1-L2, L2-L3, L3-L1

See the **Installation Manual** for further information.

### Additional Documentation

Please visit the Auto-Maskin website <http://www.auto-maskin.com> for additional documentation.