RedyIndustrial™ Series

This Quick Start Guide for the RedyIndustrial Series Thermal Mass Flow Meters and Controllers gives easy set up and installation instructions. For complete instructions, please download and read the RedyIndustrial Series Instruction Manual. Before installing meter, follow the steps below.

Step 1. Download Instruction Manual

To get technical information, download the RedyIndustrial Series Instruction Manual at sierrainstruments.com/RedyIndustrial-manual

Step 2. Download FREE Software

Download the most current RedyIndustrial product software at sierrainstruments.com/RedyIndustrial-software. Use the included cable (if ordered) to connect the meter to your computer.

IMPORTANT! If you do not have an internet connection, you must download the software to a USB stick or other storage device.

Safety and General Information

1. For safe operation, please consider the process and ambient conditions for which the device is designed and specified at the time of delivery. This information can be found on the data label on the instrument housing and in the Instruction Manual.

2. Do not remove the electronics housing to prevent damage to the unit. A damaged hologram seal will void the warranty.

3. There are no serviceable parts inside the unit. Repairs must be performed by qualified personnel only.

Installation and Electrical Connection

1. Do not use Teflon® tape or liquid sealing on the process connections.

2. Please ensure that the piping is clean and purged before you connect the flow meter.

3. The gas used must be clean and dry.

4. For particle protection, we recommend to install our 50µm filter at the inlet.

5. It is recommended that the user checks the device on a regular schedule to ensure that it is leak free as both metal and elastomeric seals, gaskets, O-rings and valve seats may change with age, exposure to process gas.

   ⚠ **Note** Your Sierra sales representative can help you to source suitable O-rings, elastomeric seals, fittings and filters.

6. Please refer to the RedyIndustrial Instruction Manual for detailed instruction on mounting orientation and location.

7. Please verify a proper electrical connection. The device must be grounded. The supply voltage is 18-30 vdc (typically ±50 mV).

   ⚠ **Note** The current consumption depends on the instrument version. Please refer to the information in the Instruction Manual.

Default Factory Settings

Modbus RTU

Communication speed	9600 Baud
Data bits	8
Stop bits	2
Parity	None
Node address	247

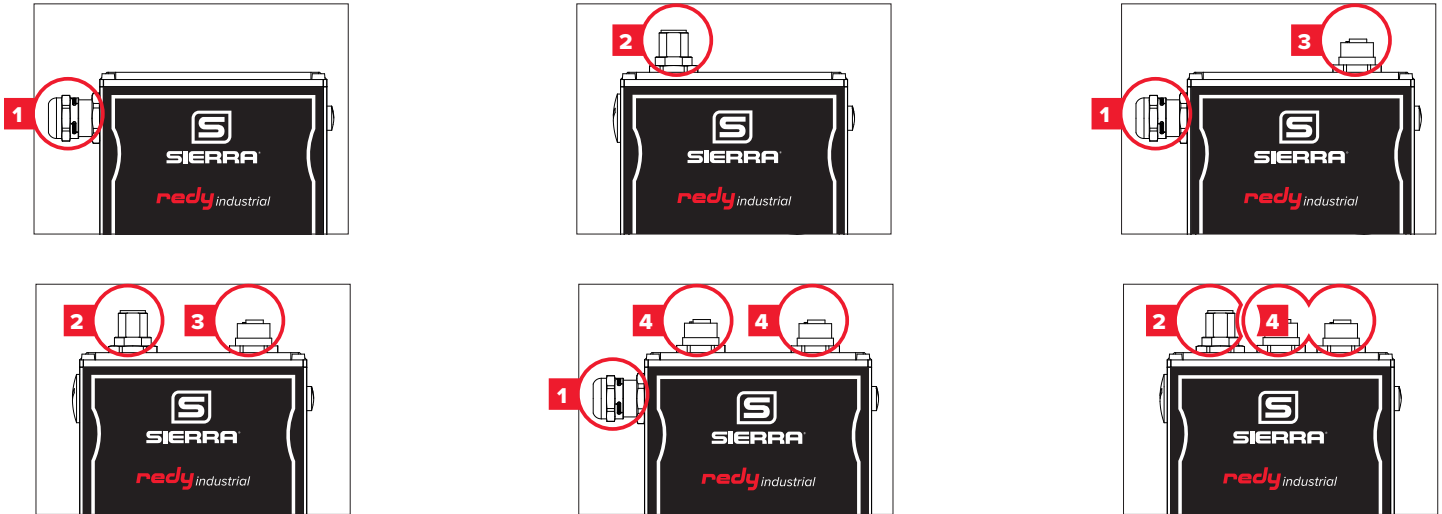**Profibus** (optional)

Node address	125

When using several devices simultaneously the user has to configure each device with an individual address!

Profinet/EtherCAT (optional)

Name	RedyIndustrial SIP
IP address	0.0.0.0 or 192.168.0.50

Further information on the device configuration can be found in the Instruction Manual.

Available Connections
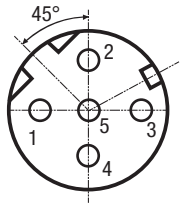

Terminal Assignment

🔴 Always disconnect the power suppy before working on the terminals and plugs!

1	Terminal Assignments Modbus RTU, Power Supply & Analog Signals (Male)v		
	Terminals	Assignment	Description
	0	Ground	Connected to Housing
Power Supply & Analog SIgnals	1	Common (-)	GND Analog Signals
	2	Supply 0 Vdc	0 vdc Supply Voltage
	3	Supply +24 Vdc	+24 vdc Supply Voltage
	4	Output (+)	Analog Output, Measured Value
	5	Setpoint (+)	Analog input, setpoint
Modbus RTU	6	Tx+	RS-485 Output (Y)
	7	Tx-	RS-485 Output (Z)
	8	Rx-	RS-485 Input (B)
	9	Rx+	RS-485 Input (A)
Valve	15	- (Valve)	Control Valve (for MFC Option Only)
	16	+ (Valve	Control Valve (for MFC Option Only)
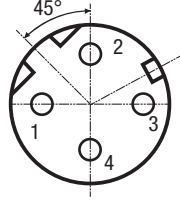
Pin Assignment

2	M12 Plug Pin Assignments Modbus RTU, Power Supply & Analog Signals (Male)		
PIN	Assignment	Wire Color	
1	RS-485 B (+) (Rx+/Tx+)	White	
2	Output +	Brown	
3	Setpoint +	Green	
4	0 Vdc	Yellow	
5	Not Connected	Grey	
6	RS-485 A (-) (Rx+/Tx+)	Pink	
7	+24 Vdc	Blue	
8	Common	Red	

3	M12 Plug Pin Assignments Profibus (Female)		
PIN	**Assignment**	**Wire Color**	
1	+5 Vdc	Brown	
2	A (-)	White	
3	Ground	Blue	
4	B (+)	Black	
5	Shield	Yellow/Green	

4	M12-D Coding Plug Pin Assignments Profinet/EtherCAT (Female)		
PIN	**Assignment**	**Wire Color**	
1	Data (Tx+)	Yellow	
2	Data (Rx+)	White	
3	Data (Tx-)	Orange	
4	Data (Rx-)	Blue	

Toxic, Flammable Gases and ATEX

Warning! In the case of toxic and flammable gases, the respective safety guidelines in each country must be followed. This device is ATEX certified for Zone 2 and Zone 22. In the case of flammable and toxic gases, fittings, cable glands and pipes intended for that purpose must be used. The responsibility for safe operation lies with the designer of the facilities.

Limited Warranty Policy – Register Online

All Sierra products are warranted to be free from defects in material and workmanship and will be repaired or replaced at no charge to Buyer, provided return or rejection of product is made within a reasonable period but no longer than one (1) years for calibration and non-calibration defects, from date of delivery.

To assure warranty service, customers must register their products online on Sierra's website. Online registration at of all of your Sierra products is required for our warranty process. Read complete warranty policy at sierrainstruments.com/warranty.

CE

Note: Please dispose of the device in an environmentally friendly way (recycle).

CONTACT SIERRA

20 Ryan Ranch Rd, Suite 109 / Monterey, CA 93940 / USA
USA: 831.373.0200
EMEA: +31.72.5071400
China: +8621 5879 8522
Email: techsupport@sierrainstruments.com or info@sierrainstruments.com
For global locations, visit: sierrainstruments.com/locations

www.sierrainstruments.com

Measurably Different™