

EVOTROX

LOGIC-RM100

Industrial Remote I/O Expansion Module
User Manual



RM-100

Note: The screen content shown in product images is representative only and may vary according to the configured application profile.

Version	Date	Description
1.0	—	Initial release - common platform manual with application profile reserved

TABLE OF CONTENTS

1. Introduction
2. Product Overview
3. Features, Applications and Technical Specifications
4. Product Images and Mechanical Drawings
5. Safety Precautions
6. Installation Guidelines
7. Status Indicators and Diagnostics
8. Hardware Interfaces
9. System Configuration
10. Communication Interface
11. I/O Architecture
12. Ordering Information
13. Wiring Diagrams
14. Work Function
15. Communication Registers
16. Cloud Device Interface / IoT Configuration
17. Commissioning Procedure
18. I/O Troubleshooting
19. Maintenance and Periodic Checks
20. General Troubleshooting
21. Warranty and Support
22. Compliance Information
23. Legal Notice and Disclaimer
24. Contact Information

1. INTRODUCTION

The LOGIC-RM100 Series is a modular industrial Remote I/O platform designed to simplify signal acquisition, field connectivity, and distributed control applications. The series enables seamless integration of sensors, transmitters, switches, actuators, PLCs, HMIs, SCADA systems, and Industrial IoT platforms through industry-standard communication protocols.

Built on a flexible and scalable architecture, the LOGIC-RM100 series supports a wide range of Digital Input (DI), Digital Output (DO), Analog Input (AI), and Analog Output (AO) modules, allowing users to select the most suitable configuration for their application. The platform is available in Serial, Ethernet, and IoT-enabled variants to meet varying connectivity and system integration requirements.

The modules support reliable industrial communication through Modbus RTU and Modbus TCP protocols, while advanced variants additionally provide secure cloud connectivity using MQTT(S), HTTP(S), CoAP, and OPC-UA protocols. This enables real-time monitoring, remote diagnostics, centralized data collection, and integration with modern Industry 4.0 and Industrial IoT infrastructures.

Designed for continuous industrial operation, the LOGIC-RM100 series is suitable for applications including process automation, utility monitoring, water and wastewater systems, HVAC, cold storage facilities, building management systems, agriculture, OEM machinery, and smart infrastructure projects.

The actual I/O configuration, communication interfaces, and functionality depend on the selected model variant and ordering code. Application-specific wiring, communication registers, and operational details are provided in the respective sections of this manual.

2. PRODUCT OVERVIEW

The LOGIC-RM100 platform is designed as a compact DIN-rail mounted remote I/O expansion system. It collects field input/output signals near the machine or process area and transfers them to a PLC, SCADA, HMI, controller, gateway or cloud platform using the selected communication interface.

The same platform can be configured with different I/O cards, including digital input, digital output, active analog input, passive analog input and analog output cards. RM100 provides RS485 Modbus RTU communication, RM200 adds Ethernet connectivity, and RM300 supports IoT/cloud connectivity where applicable.

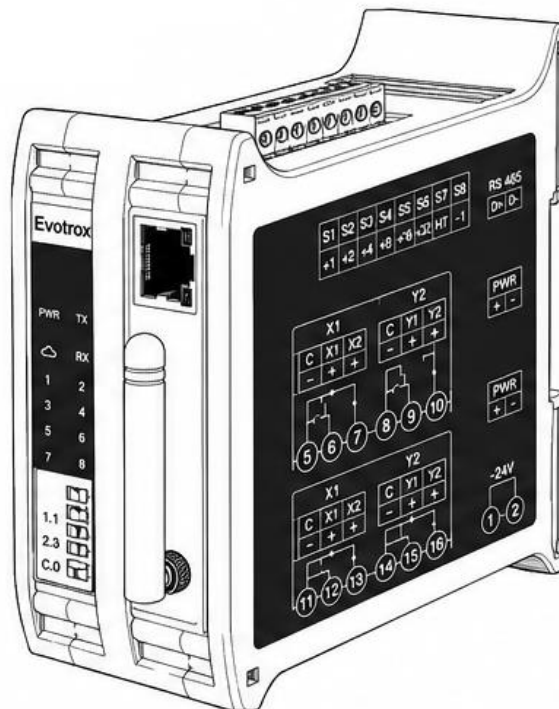


Figure 1: LOGIC-RM100 product overview

3. FEATURES, APPLICATIONS AND TECHNICAL SPECIFICATIONS

3.1 FEATURES

- Modular universal I/O expansion platform
- Supports up to 8 channels per I/O module
- Available in Digital Input, Digital Output, Analog Input and Analog Output variants
- DIN-rail mounted industrial design
- RS485 Modbus RTU/ASCII communication
- Optional Ethernet connectivity
- Optional Industrial IoT connectivity
- Supports MQTT(S), HTTP(S), CoAP and OPC-UA protocols
- 14-bit high-resolution analog input acquisition
- 12-bit analog output control
- Opto-isolated digital inputs and outputs
- 2.5 kV isolation protection
- Integrated diagnostic LED indication for communication and I/O status
- Smart Web UI configuration interface in IoT variants
- Industrial-grade surge and overvoltage protection
- Designed for distributed monitoring and control applications

3.2 TECHNICAL SPECIFICATIONS

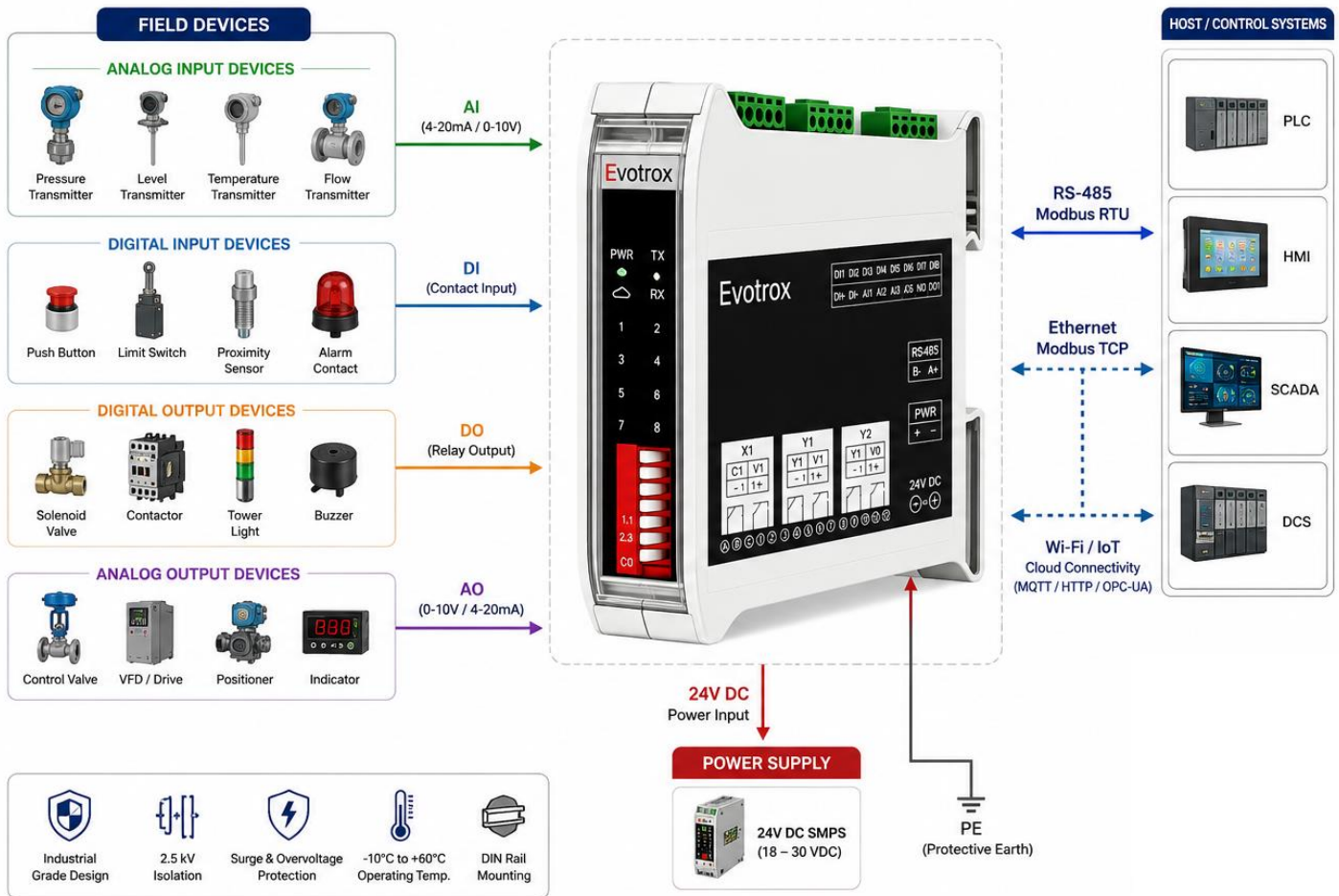
Category	Parameter	Specification
General	Product Type	Universal Remote I/O Expansion Module
	Series	LOGIC-RM100 / RM200 / RM300
	Mounting	DIN Rail Mount
	Expansion Slots	4 Slots
	Channel Capacity	Up to 8 Channels
Power Supply	Supply Voltage	24 VDC (Typical)
	Operating Range	18 to 30 VDC
	Power Consumption	< 10 W (Depending on Configuration & Load)
Analog Input (AI Variant)	Input Type	8 Channel Analog Input
	Signal Type	4-20 mA
	Resolution	14-bit
	Accuracy	±0.1% Full Scale (Typical)
	Sampling Rate	1 kHz
	Input Impedance	>100 kΩ
	Current Shunt Resistance	250 Ω
	Isolation	2.5 kV
Analog Output (AO Variant)	Protection	±30 V Overvoltage Protection
	Output Signal	0-10 V / 4-20 mA
	DAC Resolution	12-bit
	Voltage Load Impedance	>1 kΩ
	Current Load Impedance	<500 Ω
Digital Input (DI Variant)	Input Type	Digital Input
	Supported Signals	Alarm, Switch, Contact Status
	Response Time	<10 ms
	Isolation	Opto-Isolated
Digital Output (DO Variant)	Output Type	Relay Output
	Relay Rating	250 VAC / 30 VDC, 5A
	Switching Frequency	1 Hz
	Isolation	Opto-Isolated, 2.5 kV
	Protection	Surge & Overload Protection
Serial Communication (RM100)	Interface	RS-485
	Protocol	Modbus RTU / ASCII
	Device Address	1-247

EVOTROX | LOGIC-RM100 Industrial Remote I/O Expansion Module

	Default Address	1
	Default Baud Rate	9600 bps
	Parity	Even
	Stop Bit	1
Ethernet Communication (RM200)	Interface	Ethernet
	Protocol	Modbus TCP/IP
	IP Configuration	DHCP / Static
IoT Communication (RM300)	Connectivity	Wi-Fi
	Configuration	Smart Web UI
	Cloud Connectivity	Supported
	Cloud Protocols	MQTT(S), HTTP(S), CoAP, OPC-UA
User Interface	Status Indicators	PWR, TX, RX, Cloud
	Expansion Indicators	Slot-wise LED Status
	Address Configuration	DIP Switch
Environmental	Operating Temperature	-10°C to +60°C
	Storage Temperature	-20°C to +80°C
	Humidity	10% to 90% RH (Non-Condensing)

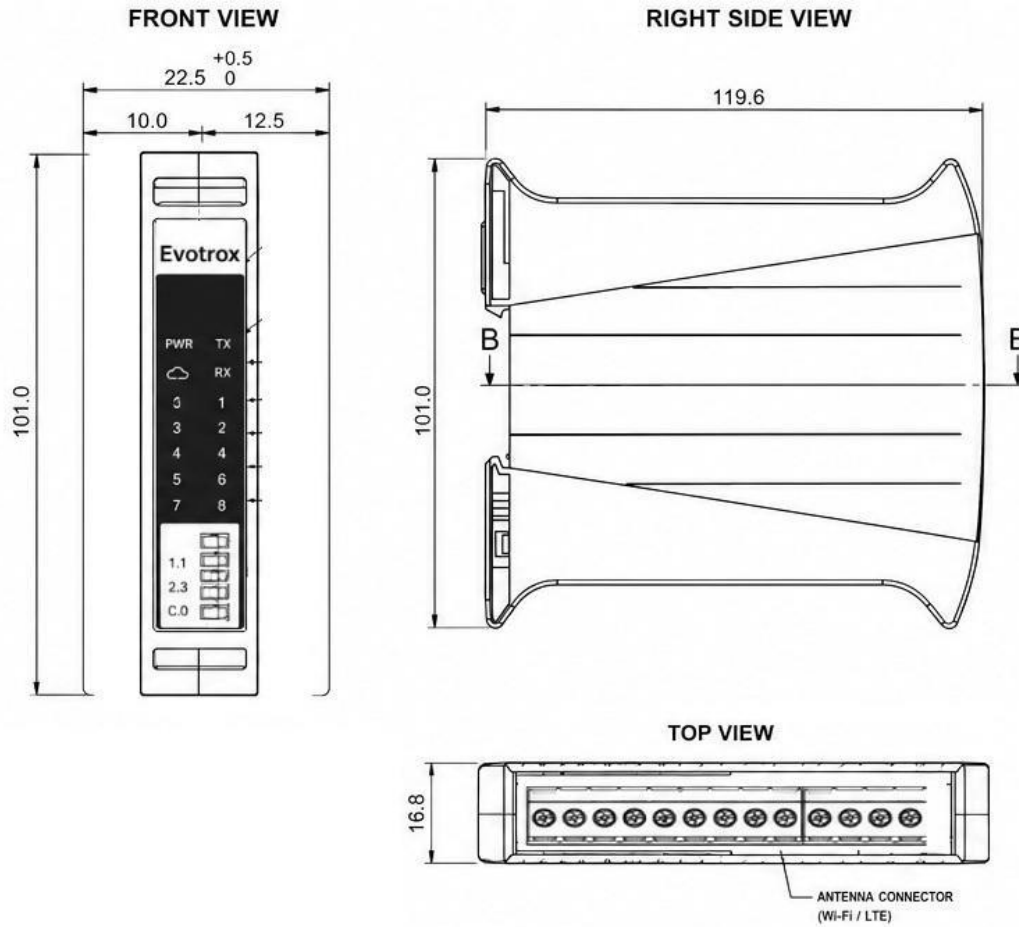
3.3 APPLICATIONS

- PLC and SCADA I/O expansion
- Industrial automation
- Process control systems
- Water and wastewater treatment
- HVAC and building automation
- Cold storage and refrigeration
- Environmental monitoring
- Agriculture and irrigation
- Energy and utility monitoring
- OEM equipment integration
- Industrial IoT and Industry 4.0 solutions



4. PRODUCT IMAGES AND MECHANICAL DRAWINGS

4.1 RM-100 SERIES DIMENSIONAL DRAWING



DIMENSIONS TABLE (mm)	
PARAMETER	VALUE
Width (Overall)	22.5 +0.5 / 0
Height (Overall)	101.0
Depth (Overall)	119.6
Top/Bottom Height	16.8
Left/Right Face Width	22.5
Mounting	DIN Rail (35 mm)

NOTES:

1. All dimensions are in millimeters (mm).
2. Tolerance: ± 0.5 mm unless otherwise specified.
3. Mounting: 35 mm DIN Rail as per EN 60715.
4. Ensure adequate ventilation for optimum performance.
5. Use 24V DC SELV/LPS power supply only.

TITLE: IOT GATEWAY MODULE (4.3 INCH DISPLAY SERIES)				
DRAWN BY:	ENG. TEAM	DATE:	10/05/2024	N.T.S.
DRAWING NO.:	EV-GW-GM100-DRG-01	REV.:	A	SHEET: 1 OF 1

Figure 2: RM-100 dimensional drawing

4.2 RM-200 / RM300 SERIES DIMENSIONAL DRAWING

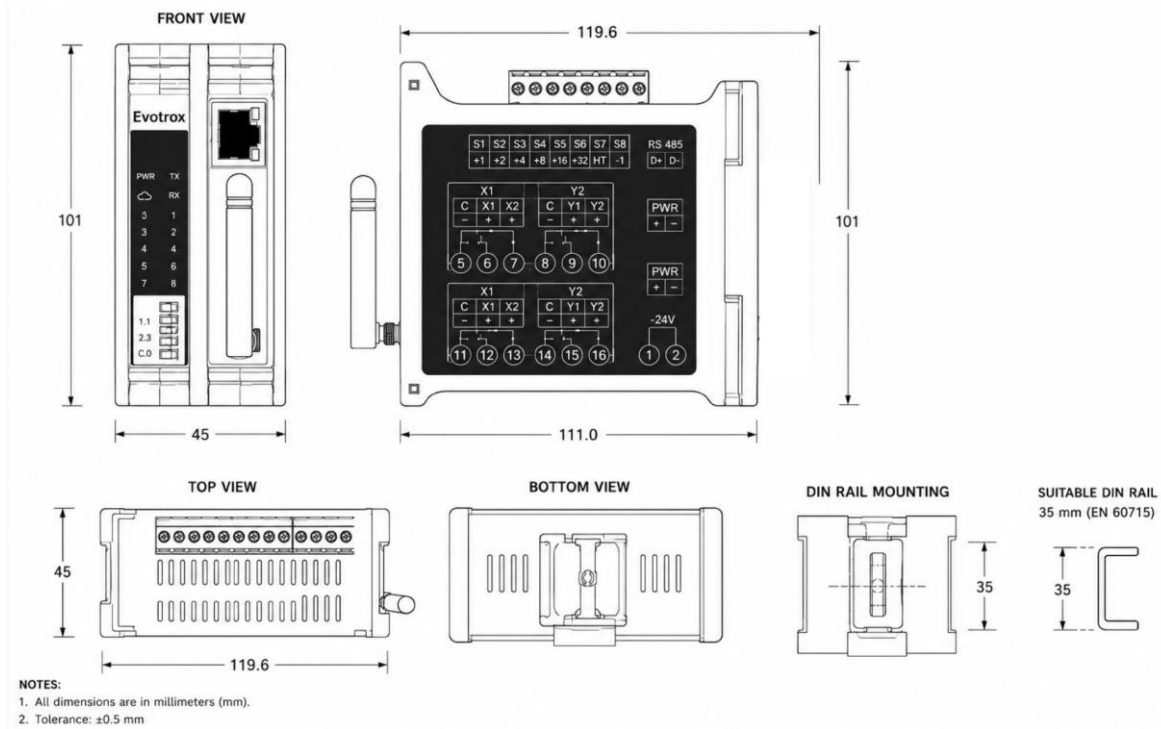


Figure 3: RM-200 / RM300 dimensional drawing

5. SAFETY PRECAUTIONS

- Installation, wiring, commissioning and servicing shall be performed by qualified personnel only.
- Disconnect power before opening the enclosure or touching internal wiring.
- Do not open the enclosure in a wet, dusty or chemically exposed environment unless the device is isolated and properly protected.
- Ensure proper earthing and panel wiring as per site electrical standards.
- Do not install the device where it can be exposed to direct flame, heavy water jet, corrosive liquid splash or mechanical damage unless additional protection is provided.
- Do not modify the enclosure, cable entries, fasteners, PCB assembly or sealing arrangements.
- Follow local industrial safety regulations, electrical codes and site safety procedures.
- Do not use the controller as the only safety protection layer where local regulation requires redundant safety devices, emergency shutdown or certified safety systems.

Note: Sensor replacement, functional testing, calibration, gas-specific safety, flameproof suitability and hazardous-area requirements are application-specific and shall be defined in the relevant product profile where applicable.

6. INSTALLATION GUIDELINES

Before installation, ensure that the module model, power supply, mounting location and wiring requirements are suitable for the intended application. Install the module in a clean, dry and well-ventilated control panel away from excessive heat, vibration, moisture, corrosive gases and sources of electrical interference.

6.1 DIN-RAIL MOUNTING

1. Verify DIN rail size and mechanical stability.
2. Place the upper mounting hook of the module on the DIN rail.
3. Press the lower side of the module until the DIN clip locks properly.
4. Ensure the module is firmly fitted and has sufficient clearance for wiring and ventilation.

6.2 ELECTRICAL WIRING

- Disconnect power before wiring.
- Use a regulated 24 VDC power supply.
- Verify terminal connections and polarity before powering the device.
- Use ferrules and properly sized conductors.
- Separate signal wiring from high-voltage and power switching cables.

6.3 GROUNDING AND COMMUNICATION CABLING

- Follow proper grounding practices.
- Use shielded cables for communication networks.
- Route communication cables separately from power cables.
- Use industrial-grade Ethernet and RS485 cabling where applicable.
- Connect the cable shield to earth at one end only unless site standards specify otherwise.

6.4 POWER-UP CHECK

After installation, verify power indication, communication status, I/O status and connected field device functionality before placing the system into service.

6.5 CABLE SELECTION GUIDELINES

- Twisted Pair shielded cable with minimum 0.5 sqm core (CU) required for serial Communication
- Termination Resistors(120E) in Loop application at both end is necessary.
- CAT5e or higher cable recommended for ethernet application
- Maximum cable length: 100 m
- Use industrial Ethernet switches
- Separate communication and power wiring
- Avoid parallel routing with power cables

7. STATUS INDICATORS AND DIAGNOSTICS

The module provides front LED indications for power, communication and I/O status. These indicators help during installation, commissioning, fault diagnosis and regular maintenance.

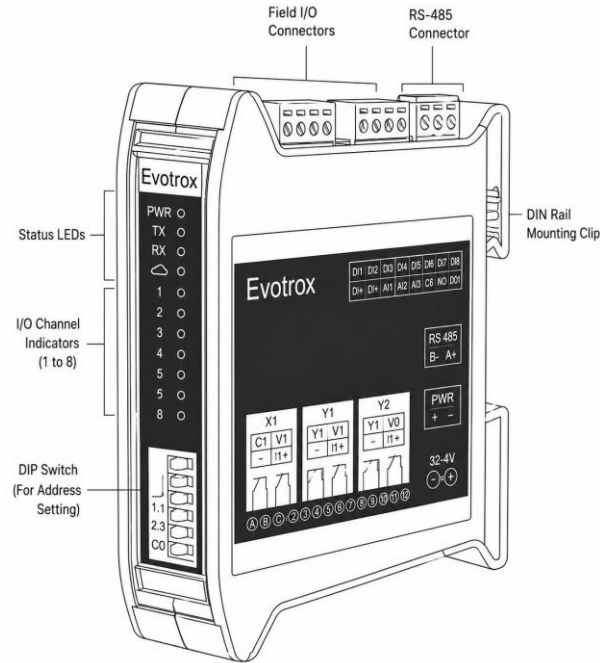


Figure 4: Product interface and status indicators

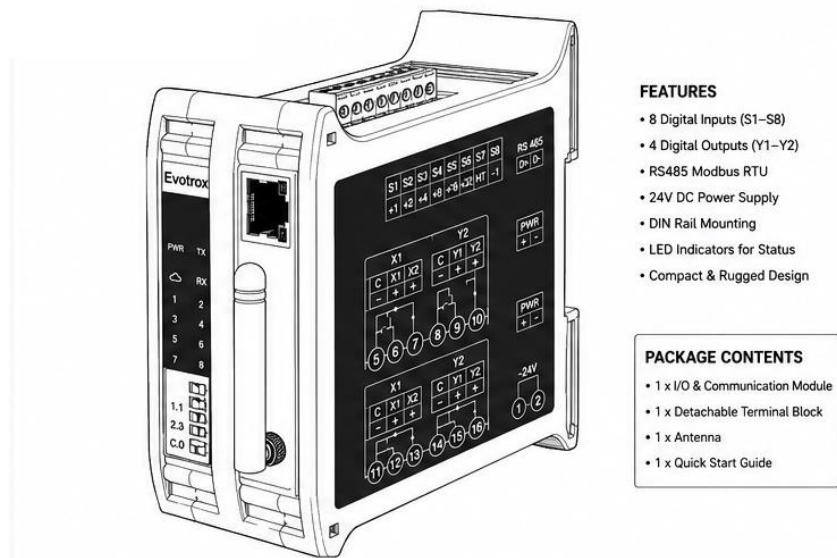


Figure 5: RM-200 / RM300 interface overview and package contents

- PWR: Indicates device power status.
- TX/RX: Indicates communication transmit/receive activity.
- Cloud: Indicates cloud status in IoT-enabled variants.
- 1 to 8: Indicates slot-wise or channel-wise I/O status depending on the configured card.

8. HARDWARE INTERFACES

The device has DIP switches to configure the device ID. The device can be connected to an RS485 network in either single-device mode or multi-device mode. In multi-device mode, every device on the same RS485 network must have a unique device ID.

The device ID can be set from 1 to 16 using the DIP switch value table below. The serial protocol used by the device is Modbus RTU slave.

S1	S2	S3	S4	S5	S6	S7	S8
+1	+2	+4	+8	+16	+32	HT	-

8.1 EXAMPLE: SETTING DEVICE ID = 9

1. Turn ON the switches whose values add up to 9: S4 = 8 and S1 = 1.
2. Keep the remaining switches OFF: S2, S3, S5, S6, S7 and S8.
3. The final DIP switch setting for ID 9 is S4 = ON and S1 = ON; all others OFF.

Note: On the product sticker, S7 is marked HT and S8 is reserved. Use these switches only as specified in the final model configuration.

9. SYSTEM CONFIGURATION

The LOGIC-RM100 platform can be configured using the required I/O module type and communication extension. The following module configurations are supported as per ordering code and product profile:

- 8 CH DI Module (8X1)
- 8 CH DO Module (8Y2)
- 8 CH AI Module - Active Analog Input (8A1)
- 8 CH AI Module - Passive Analog Input (8A2)
- 8 CH AO Module (8A3)

10. COMMUNICATION INTERFACE

The module supports industrial serial and Ethernet communication for integration with external devices, supervisory systems and network platforms. Communication settings must match the connected system to avoid communication failure, timeout or data loss.

Port	Typical Role	Key Settings
Port-1 RS485	Modbus Slave	Device ID, baud rate, parity, stop bit, data bit
Port-2 As Ethernet LAN	Modbus TCP/IP	IP address, netmask, gateway, MAC address, port number
Port-2 As WAN / Cloud Interface	Internet / Linked IoT connectivity	Network mode, credentials, cloud registration

11. I/O ARCHITECTURE

Each I/O module is designed around modular card functions. The selected card determines the available terminal function, channel type, field wiring and supported register mapping.

Card	Channel Type	Function
8X1	Digital input	8-channel digital input using X1 input card
8Y2	Digital output	8-channel digital output using Y2 output card
8A1	Active analog input	Dual active input per 3-terminal port; A1 for sensor/input 1, A2 for sensor/input 2 and C as common ground
8A2	Passive analog input	One passive sensor per 3-terminal port. RTD sensors use all 3 terminals; thermocouples use 2 terminals and the unused terminal remains NC
8A3	Analog output	8-channel analog current output

12. ORDERING INFORMATION

12.1 ORDERING CODE

Code Segment	Description
LOGIC RM100	Remote IO Module

INPUT / OUTPUT SPECIFICATION	8X1: 8-channel digital input card 8Y2: 8-channel digital Output card 8A1: 8- channel Active Analog Input 8A2: 8-channel Passive Analog input 8A3: 8-channel Analog Current Output
EXTENSIONS	N: BLANK (NO EXTENSION) L1: LAN CARD FOR EXTENSIVE LAN PROTOCOL SUPPORT E1: IoT Card for Network Connectivity and IoT Application

12.2 CODE DESCRIPTION

Code	Title	Description
X1	DI Card – 2CH	2 Ch Opto-Isolated Digital Input
Y1	DO Card – R1CH	1 Ch Relay Output
Y2	DO Card – R2CH	2 Ch Relay Output
Y3	DO Card – T2CH	2 Ch Transistor Output
A1	AI Card – IV	2 Ch Configurable Active Analog Input: 0-1 V, 0-5 V, 0-10 V, 0-20 Ma, 4-20 Ma
A2	AI Card – RMV	1 Ch Configurable Passive Analog Input: NTC Thermistor (10K), PT100, PT1000, CU50, T/C (J, K, R, S, T)
A3	AO Card – 2CH	2 Ch Analog Output: 0-20 Ma, 4-20 Ma
I1	GSM Card	GSM / 4G Module for Cellular Network
L1	Lan Card	Extension Lan card to support LAN Protocols
E1	IoT Card (EdgeLink-100)	IoT Card for Network Connectivity and IoT Application

13. WIRING DIAGRAMS

The following diagrams show typical external wiring references for each I/O card type. Always confirm the final product label and ordering code before wiring the module.

13.1 8 CH DI MODULE (8X1)

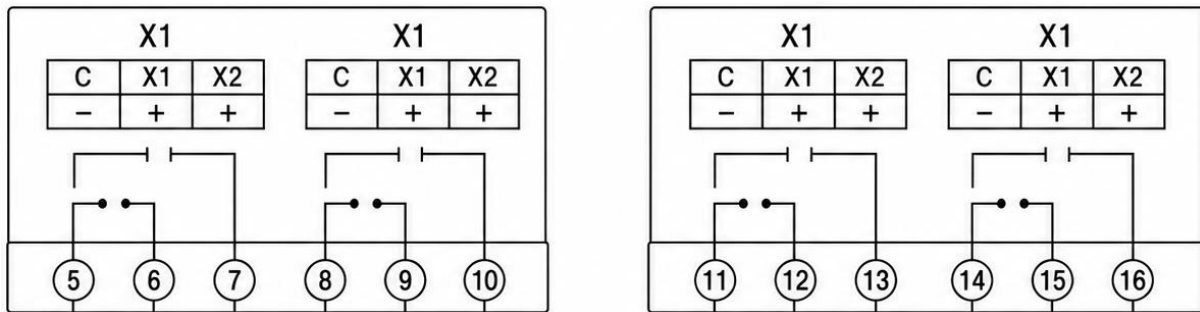


Figure 6: 8X1 digital input wiring diagram

13.2 8 CH DO MODULE (8Y2)

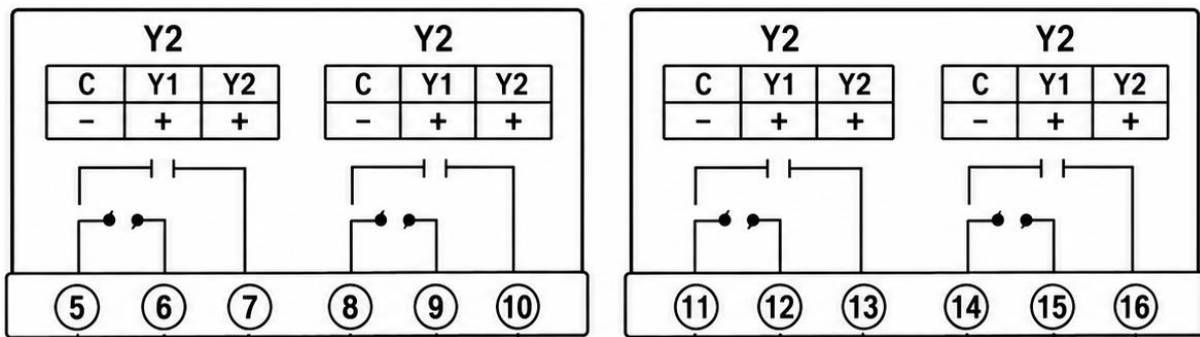


Figure 7: 8Y2 digital output wiring diagram

13.3 8 CH AI MODULE (8A1) - ACTIVE ANALOG INPUT

In active sensor mode, each 3-terminal port can accept two active sensor signals. A1 is used for sensor/input 1, A2 is used for sensor/input 2 and C is the common ground/reference terminal.

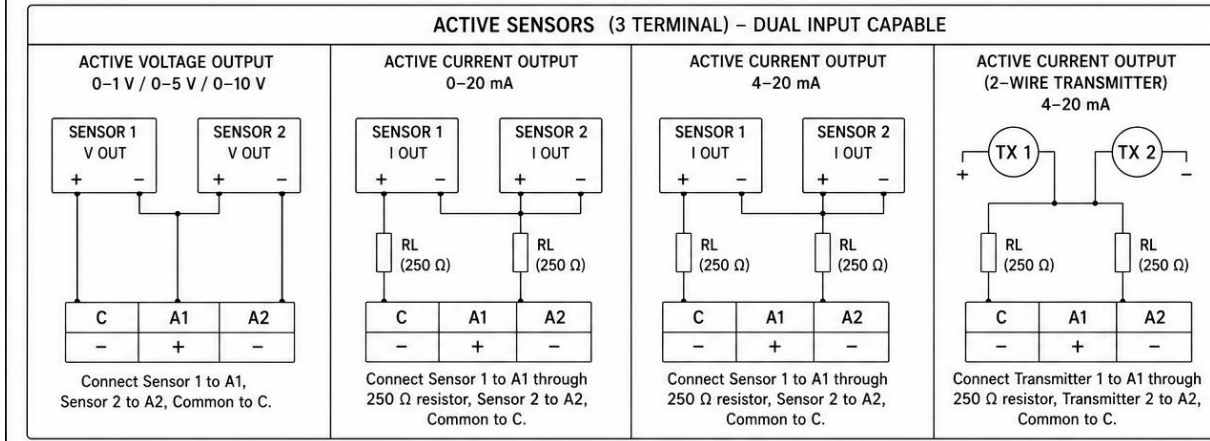


Figure 8: Active analog input sensor connection examples

13.4 8 CH AI MODULE (8A2) - PASSIVE ANALOG INPUT

In passive sensor mode, RTD sensors use all 3 terminals of the port. Thermocouple inputs use only 2 terminals; the unused terminal shall remain not connected as indicated in the wiring diagram.

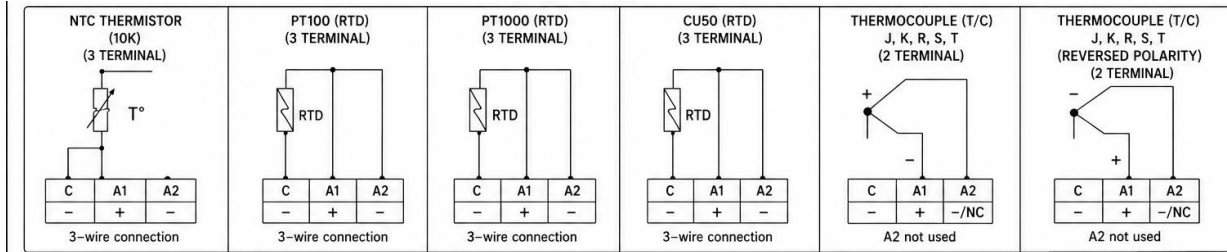


Figure 9: Passive analog input sensor connection examples

13.5 8 CH AO MODULE (8A3)

The analog output module provides current output channels as per selected configuration. Ensure correct load impedance and polarity before enabling output operation.

14. WORK FUNCTION

After power-up, the module initializes the configured I/O cards, reads DIP switch settings, starts the communication interface and begins updating I/O status and data registers. The host PLC, HMI, SCADA or IoT gateway can read field values and write output commands through the supported Modbus register map.

- Acquire field input signal or output command based on card type.
- Convert signal into internal digital values using the configured scaling and calibration parameters.
- Update channel-wise and slot-wise Modbus registers.
- Transmit data to supervisory systems through RS485, Ethernet or cloud interface depending on variant.
- Operate digital/analog outputs according to received command and configured logic.

15. COMMUNICATION REGISTERS

The following register list provides the common register map used for slot data, sensor data, GPIO status, card selection and channel configuration parameters.

Sr. No.	Register	Description
	40074	Slot 1 sensor data-1
	40075	Slot 1 sensor data-2
	40076	Slot 2 sensor data-1
	40077	Slot 2 sensor data-2
	40078	Slot 3 sensor data-1
	40079	Slot 3 sensor data-2
	40080	Slot 4 sensor data-1
	40081	Slot 4 sensor data-2
	30002	Sensor data 1
	30003	Sensor data 2
	30004	Sensor data 3
	30005	Sensor data 4
	30006	Sensor data 5
	30007	Sensor data 6
	30008	Sensor data 7
	30009	Sensor data 8
	30010	Slot 1 GPIO 1
	30011	Slot 1 GPIO 2
	30012	Slot 2 GPIO 1
	30013	Slot 2 GPIO 2
	30014	Slot 3 GPIO 1
	30015	Slot 3 GPIO 2
	30016	Slot 4 GPIO 1
	30017	Slot 4 GPIO 2
	40001	Card slot 1 section for card details selection
	40002	Card slot 2 section for card details selection
	40003	Card slot 3 section for card details selection
	40004	Card slot 4 section for card details selection
	40010	Channel -1 Zero count
	40011	Channel -1 span count
	40012	Channel -1 offset
	40013	Channel -1 dp count
	40014	Channel -2 Zero count
	40015	Channel -2 Span count
	40016	Channel -2 offset
	40017	Channel -2 dp count
	40018	Channel -3 Zero count
	40019	Channel -3 span count
	40020	Channel -3 offset
	40021	Channel -3 dp count
	40022	Channel -4 Zero count
	40023	Channel -4 Span count
	40024	Channel -4 offset
	40025	Channel -4 dp count
	40026	Channel -5 Zero count
	40027	Channel -5 Span count
	40028	Channel -5 offset
	40029	Channel -5 dp count
	40030	Channel -6 Zero count
	40031	Channel -6 Span count
	40032	Channel -6 offset
	40033	Channel -6 dp count
	40034	Channel -7 Zero count
	40035	Channel -7 Span count
	40036	Channel -7 offset

EVOTROX | LOGIC-RM100 Industrial Remote I/O Expansion Module

40037	Channel -7 dp count
40038	Channel -8 Zero count
40039	Channel -8 Span count
40040	Channel -8 offset
40041	Channel -8 dp count
40042	Slot 1 DO-1 fix count
40043	Slot 1 DO-1 Alarm mode
40044	Slot 1 DO-1 hys
40045	Slot 1 DO-1 actual count
40046	Slot 1 DO-2 fix count
40047	Slot 1 DO-2 Alarm mode
40048	Slot 1 DO-2 hys
40049	Slot 1 DO-2 actual count
40050	Slot 2 DO-1 fix count
40051	Slot 2 DO-1 Alarm mode
40052	Slot 2 DO-1 hys
40053	Slot 2 DO-1 actual count
40054	Slot 2 DO-2 fix count
40055	Slot 2 DO-2 Alarm mode
40056	Slot 2 DO-2 hys
40057	Slot 2 DO-2 actual count
40058	Slot 3 DO-1 fix count
40059	Slot 3 DO-1 Alarm mode
40060	Slot 3 DO-1 hys
40061	Slot 3 DO-1 actual count
40062	Slot 3 DO-2 fix count
40063	Slot 3 DO-2 Alarm mode
40064	Slot 3 DO-2 hys
40065	Slot 3 DO-2 actual count
40066	Slot 4 DO-1 fix count
40067	Slot 4 DO-1 Alarm mode
40068	Slot 4 DO-1 hys
40069	Slot 4 DO-1 actual count
40070	Slot 4 DO-2 fix count
40071	Slot 4 DO-2 Alarm mode
40072	Slot 4 DO-2 hys
40073	Slot 4 DO-2 actual count

16. CLOUD DEVICE INTERFACE / IOT CONFIGURATION

The controller supports cloud connectivity through the Linked IoT platform, enabling remote monitoring, alarm notifications, data logging, analytics and device management from anywhere.

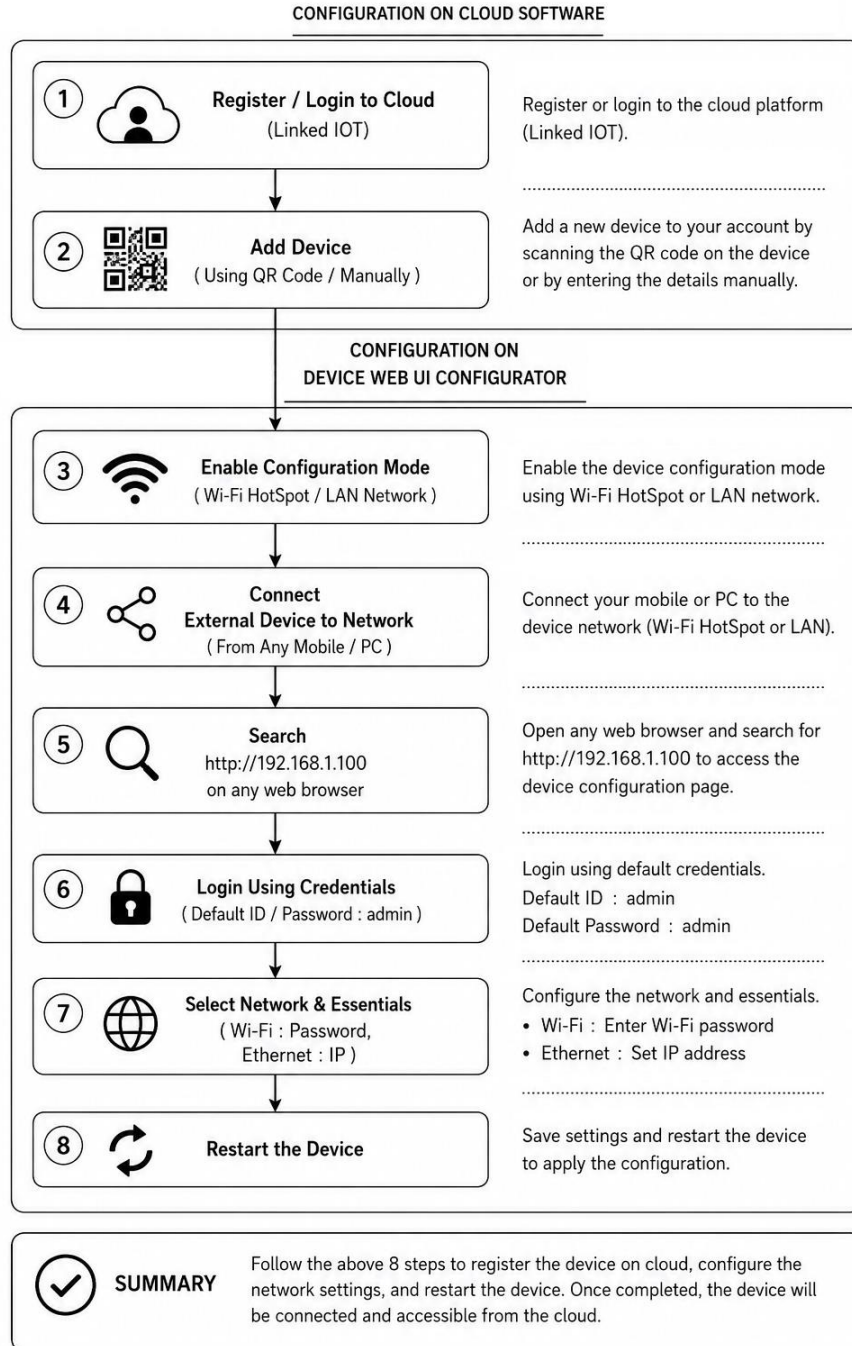


Figure 10: Cloud and Web UI configuration flow

16.1 STEPS TO CONNECT DEVICE

1. Register or login to the Linked IoT cloud platform.
2. Add a new device using QR code or manual details.
3. Enable device configuration mode using Wi-Fi hotspot or LAN network.
4. Connect mobile or PC to the device network.
5. Open a browser and access <http://192.168.1.100> to open the device configuration page.

6. Login using default credentials. Default ID: admin. Default Password: admin.
7. Select network and essential settings such as Wi-Fi password or Ethernet IP settings.
8. Save settings and restart the device to apply configuration.

16.2 PREREQUISITES

- The device variant must support IoT functionality.
- A stable Internet connection is available.
- A valid Linked IoT user account is available.
- The device is installed and powered correctly.

16.3 CLOUD CREDENTIALS AND LINKS

Access Type	Link
Web Portal	www.linkediot.com/login
Android Application	https://play.google.com/store/apps/details?id=com.linkediot
iOS Application	https://apps.apple.com/us/app/linkediot

16.4 NETWORK CONFIGURATION OPTIONS

Mode	Configuration Details
Wi-Fi Mode	Select available Wi-Fi network, enter Wi-Fi password and configure network priority.
Ethernet Mode	DHCP or static IP configuration, IP address, subnet mask, gateway and DNS server.
Cellular Mode (GSM)	APN settings, SIM configuration and network priority selection depending on model variant.

16.5 NETWORK PRIORITY MANAGEMENT

When multiple communication interfaces are available, the device can automatically select the preferred network according to the configured priority sequence. This supports reliable cloud communication by switching to an available network when the primary connection becomes unavailable.

16.6 IMPORTANT NOTES

- Use a dedicated configuration network when accessing the Web UI Configurator.
- Ensure Internet connectivity is available on the selected communication interface.
- Change the default administrator password after commissioning for improved security.
- Network configuration parameters can be modified through the Web UI Configurator.
- Successful cloud connection status can be verified from the device display and Linked IoT platform dashboard.

17. COMMISSIONING PROCEDURE

Follow the steps below after installation and wiring are completed.

1. Verify module model, firmware code and configured I/O profile details.
2. Check power supply voltage and polarity before powering the device.
3. Verify all sensor, DI, DO, AO and communication wiring as per the wiring diagram.
4. Power ON the module and confirm PWR, communication and I/O status LEDs.
5. Configure device ID, baud rate, parity, IP address or network parameters as applicable.
6. Verify sensor readings or input status for all enabled channels.
7. Set scaling, zero/span, output logic and application parameters as required by site conditions.
8. Test digital input, digital output, analog input and analog output operation safely as applicable.
9. Verify RS485 / Ethernet / cloud communication with the connected external system.
10. Record final settings, test results and commissioning observations.

18. I/O TROUBLESHOOTING

Issue	Possible Cause	Recommended Action
No sensor reading	Sensor not powered, wrong wiring, input disabled, or communication mismatch	Check sensor wiring, power supply, channel selection, and communication settings.
Incorrect gas value	Wrong scaling, calibration mismatch, or sensor drift	Verify zero/span values, calibration settings, and sensor condition.
Alarm not generated	Set value too high, alarm disabled, or wrong mode selection	Check SV, hysteresis, alarm mode, and alarm configuration.
Alarm remains active	Actual gas condition, wrong hysteresis, sensor drift, or acknowledgement not performed	Verify gas condition, check set values, perform zero/span check, and acknowledge alarm.
Digital output not operating	Output not assigned, relay wiring issue, or control condition not met	Check output mapping, relay wiring, set value, and control mode.
RS485 communication failure	Wrong address, baud rate, polarity, or duplicate device ID	Verify device ID, baud rate, parity, stop bit, A/B polarity, and termination.
Ethernet / Modbus TCP failure	Wrong IP, gateway, port, or network issue	Check IP settings, cable, network switch, gateway, and TCP port 502.
IoT connection unavailable	Internet not available or cloud configuration incomplete	Check Wi-Fi/Ethernet settings, cloud credentials, and network availability.

18.1 APPLICATION NOTES

If the issue remains unresolved after the above checks, record the module model, firmware code, active alarm condition, wiring details, communication settings and observed behavior before contacting technical support.

Item	Details
Brand	EVOTROX Technologies
Application	Remote I/O Expansion Module
Controller Model	LOGIC-RM100 / RM200 / RM300 Series
Firmware Code	As per supplied model / firmware label
Website	www.evotrox.com
Support Phone	+91 9909044065

19. MAINTENANCE AND PERIODIC CHECKS

The LOGIC-RM100 series is designed for reliable operation with minimal maintenance. To ensure long-term performance and system reliability, follow the recommendations below:

- Periodically inspect all wiring connections and terminal tightness.
- Keep the module and surrounding panel free from dust, moisture and contaminants.
- Clean the front surface using a soft, dry cloth. Do not use solvents or abrasive cleaning agents.
- Verify proper operation of communication interfaces and connected devices.
- Ensure adequate ventilation inside the control panel to prevent excessive heat buildup.
- Regularly back up configuration settings and logged data, if applicable.
- Update firmware only using approved procedures and authorized firmware versions.
- Immediately replace damaged cables, connectors or accessories.

Note: Sensor response verification, bump testing, calibration, analog output calibration and relay/interlock checks shall be defined in the application-specific section where applicable.

20. GENERAL TROUBLESHOOTING

If the module does not operate as expected, perform the following basic checks before contacting technical support.

Issue	Possible Cause	Recommended Action
No power indication	Power supply not available, wrong polarity or loose terminal	Verify 24VDC supply, polarity and terminal wiring.
Display not starting	Power issue, loose connector, firmware or internal fault	Check supply voltage and restart the device. Contact service if the issue continues.
RS485 communication error	Incorrect wiring, wrong baud rate, parity mismatch or duplicate device ID	Check RS485 A/B polarity, device ID, baud rate, parity, stop bit and network wiring.
Ethernet communication failure	Wrong IP settings, cable fault or network mismatch	Check IP address, subnet mask, gateway, port number and Ethernet cable.
Cloud connection not available	Internet unavailable, wrong network credentials or IoT disabled	Check IoT mode, network connection, credentials and Linked IoT configuration.
USB export not working	Unsupported USB drive, file system issue or logging disabled	Use supported USB drive and verify logging/export settings.
Alarm or output action not as expected	Application parameter, wiring or logic issue	Check application-specific set values, output wiring and control logic in Part-2.
Incorrect field reading	Sensor/instrument wiring, calibration or configuration issue	Check wiring and application-specific scaling/calibration settings.

Note: If the issue persists, record the observed fault condition, device model, serial number, application details and system settings before contacting authorized technical support.

21. WARRANTY AND SUPPORT

The LOGIC-RM100 series is covered by a limited warranty against manufacturing defects in materials and workmanship for the period specified in the product warranty policy. The warranty applies under normal operating conditions and does not cover damage resulting from improper installation, misuse, unauthorized modifications, electrical surges, accidents or operation outside the specified limits.

For technical assistance, product support, firmware updates, documentation or service-related inquiries, contact Evotrox Technical Support through the official support channels. When requesting support, provide the product model, serial number, application details and a brief description of the issue.

22. COMPLIANCE INFORMATION

The module is designed for industrial DIN-rail mounted applications and shall be installed according to applicable electrical, safety and site regulations. Product certification and compliance markings shall be verified against the final product label, declaration and applicable certificate supplied with the product.

Compliance / Marking	Status / Note
CE	Applicable only if declared for the supplied model
RoHS	Applicable only if declared for the supplied model
IP65 Front Protection	Applicable to correctly mounted front panel condition
WEEE / Disposal	Dispose according to local electronic waste regulations
Site Safety Approval	To be verified by installer or end user as per final installation

23. LEGAL NOTICE AND DISCLAIMER

Specifications are subject to change without prior notice. The user is responsible for ensuring proper installation, commissioning, operation and maintenance according to local industrial safety regulations, electrical codes and site safety procedures.

This product is intended to assist in industrial monitoring, control, alarm generation and data communication. It does not replace statutory safety systems, emergency response procedures, certified safety systems or operator training where such systems are required by applicable regulation or site safety policy.

Performance depends on installation quality, wiring condition, field device condition, parameter configuration, environmental exposure and maintenance practices. Periodic functional testing and verification are essential for reliable operation.

Application-specific safety, calibration, sensor replacement, gas-specific operation, hazardous-area suitability, cable gland selection and field installation requirements must be verified against the final product label, application documentation and local regulatory requirements before use.

24. CONTACT INFORMATION

Company	Details
Brand	EVOTROX Technologies
Location	Ahmedabad, Gujarat, India
Phone	+91 9909044065
Website	www.evotrox.com