IMPORTANT PRODUCT INFORMATION GFK-2436M June 2023

## VersaMax Micro-20/40/64 PLC

Ethernet Option Module (IC200UEM001)



#### Warnings and Caution Notes as Used in this Publication

#### **WARNING**

Warning notices are used in this publication to emphasize that hazardous voltages, currents, temperatures, or other conditions that could cause personal injury exist in this equipment or may be associated with its use.

In situations where inattention could cause either personal injury or damage to equipment, a Warning notice is used.

### **A** CAUTION

Caution notices are used where equipment might be damaged if care is not taken.

**Note:** Notes merely call attention to information that is especially significant to understanding and operating the equipment.

These instructions do not purport to cover all details or variations in equipment, nor to provide for every possible contingency to be met during installation, operation, and maintenance. The information is supplied for informational purposes only, and Emerson makes no warranty as to the accuracy of the information included herein. Changes, modifications, and/or improvements to equipment and specifications are made periodically and these changes may or may not be reflected herein. It is understood that Emerson may make changes, modifications, or improvements to the equipment referenced herein or to the document itself at any time. This document is intended for trained personnel familiar with the Emerson products referenced herein.

Emerson may have patents or pending patent applications covering subject matter in this document. The furnishing of this document does not provide any license whatsoever to any of these patents.

Emerson provides the following document and the information included therein as-is and without warranty of any kind, expressed or implied, including but not limited to any implied statutory warranty of merchantability or fitness for particular purpose.

## Introduction

This IPI describes the Ethernet Option module for a VersaMax Micro-20, -40 or -64 PLC CPU. This module cannot be used with other types of VersaMax Nano or Micro PLCs.

For more information about Option Modules, and about VersaMax Micro-20, -40 and -64 PLCs, please refer to the *VersaMax Nano and Micro PLCs User's Manual*, GFK-1645J or later.

## **Important Product Information**

## **Functional Compatibility**

The default data rate with Ethernet option module firmware version 2.0 is 175000 bps. Micro firmware versions below 3.83 do not support 175000 bps. If firmware version 2.0 is to be used with Micro firmware versions prior to 3.83, the data rate on Ethernet Option module should be changed to 38400 bps or less, as per the requirement.

## **Problems Resolved by this Product Revision**

N/A

# New Features and Enhancements in this Revision

**Ordering Information** 

Part Number	Description
IC200UEM001	RJ 45, 10/100 Mbit Ethernet Option module supporting SRTP.

## Upgrades

All previous versions can be upgraded to this firmware version. Once the module is upgraded to the 3.3 version, it will **not** support downgrade to older revision. Attempting to downgrade firmware may cause the module to fail permanently.

**Note:** To reduce the risk of this being accidentally or maliciously used, to permanently disable the module, Emerson strongly recommends that TFTP be disabled by the user, and only enabled via (password-protected) telnet when a firmware update is required.

## FCC and ICES Requirements for the US and Canada

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

**Note:** This Class A digital apparatus complies with Canadian ICES-003.

Changes or modifications not expressly approved by Emerson could void the user's authority to operate the equipment.

Version	Date	Comments
		Product labels have been updated to show compliance with new certifications.
IC200UEM001-EF	h	For updated certifications, please refer to <u>https://emerson-</u>
	June 2025	mas.my.site.com/communities/en US/Article/Certifications-and-Agency-
		Approvals-Landing-Page.
		Following Emerson's acquisition of this product, changes have been made to
	Nov 2019	apply appropriate branding and registration of the product with required
IC2000LIM001-DF	100 2019	certification agencies. No changes to material, process, form, fit or
		functionality.
	Jan 2018	Firmware release 3.3.0.7 fixes issue of inconsistent Modbus communication
IC2000EIM001-CF		for different baud rate settings.
	Nov 2017	Firmware release 3.3.0.6 fixes issue of Modbus TCP firmware upgrade with CD
IC2000EIM001-CE		version of modules.
		Firmware release 3.3 addresses rare issue of the Ethernet Option module
IC200UEM001-CD	Aug 2013	stopping communication and not responding to commands. It also adds new
		security settings in the Telnet interface.
IC200UEM001-CC	Dec 2010	Labeling change. No changes to functions, features or compatibility.
	Aug 2000	Added support for Modbus/TCP Client, enhanced data throughput
IC2000EM001-BC	Aug 2009	(175,000bps), and 16-character password security.
IC200UEM001-AB	Dec 2007	Improved noise immunity.
	Aug 2005	Initial release. Compatible with VersaMax Micro 64 firmware release 3.5 and
	Aug 2005	PAC Machine Edition 5.5

## **Release History**

## **Ethernet Option Module**

Ethernet Module IC200UEM001 can be used with a Micro-20, -40 or -64 -Point PLC to provide an Ethernet Port.

#### Figure 1: IC200UEM001 Connectors



When installed on the Micro 20, 40 or 64 PLC, the Ethernet Port Option Module becomes Port 2. It supports the following communications protocols: SRTP, Modbus Server and client (separate download) and pass-through port (separate download). Protocol options are available online at <u>https://emerson-mas.my.site.com/communities/CC\_Home</u>.

## **Specifications**

Specification	Description
Processor Speed	DSTni-EX CPU, 48MHz
Memory	256 kByte RAM, 512 kByte FLASH
Connection Type	RJ 45 10Base-T/100Base-TX Ethernet
Entity Type	Client/Server
Bus Speed	10/100Mbaud
Protocols Supported	SRTP (preloaded)
	Modbus TCP Server and Client (optional)
	Tunneling (optional)
Number of Connections Supported	Supports up to 8 Modbus TCP/IP server channels.
	• If client configured, then 1 client and 7 server channels supported.
	Supports 4 SRTP server channels
	Supports 1 connection for Tunneling
Mode	Full Duplex

June 2023

## **Status LEDs**

LED	Color	Description
Link LED	Amber, On	Connection to Micro PLC established and network is connected
Activity	Green, Flashing	When there is any activity on the network
Status	Off	No errors
	Red, On	Duplicate IP address present or network controller error
	Red, Blinking (2x/sec)	No DHCP response or Setup menu active

#### **Figure 2: Status LED Location**



## Installation

Power to the VersaMax Micro PLC *must be turned off* when installing or removing Option Modules.

1. Remove the two doors shown in **Figure 3** by pressing downward on the latches and lifting them away from the module.



#### GFK-2436M

2. If a port-type Option Module is being installed, orient the connector on the Option Module with the connector in the Micro PLC. Be careful to avoid contact with the exposed components in the module.



- 3. Press the Option Module downward until it clicks into place.
- 4. Install the screws provided with the Option Module into the corners indicated in Figure 4.
- 5. If a Memory Pack Module is being installed, orient the connector on the back of the Memory Pack Module with the connector on the Micro PLC or port-type Option Module. Press the Memory Pack down until it clicks into place.



6. Install the protective cover(s). If only the Memory Pack Module is used, both covers may be installed. If a port module is used, the right-hand cover is not installed, and the port connector remains accessible.

## Configuration

Use of the Port Option module as Port 2 and the protocol selection must be set up in the configuration software. After making those selections, the communications parameters can also be configured.

**The option port should be configured for Ethernet.** If the configuration and hardware do not match, the PLC logs a System Configuration Mismatch fault in the PLC Fault Table.

Protocol	Parameters	Value
SRTP Server	Port Mode	SNP
	Port Type	Slave
	Data Rate	19.2, 38.4 or 175.0 kbps (default)
	Flow Control	None
	Parity	Odd (default), Even, None
	Stop bits	1 (default) or 2
	Time Out	Long
	Turnaround Time	0
Modbus TCP	Port Mode	RTU
Client/Server*	Port Type	Slave
	Data Rate	19.2, 38.4 or 175.0 kbps (default)
	Flow Control	None
	Parity	Odd (default), Even, None
	Station Address	Valid range
		0–247. Default=1
	Modbus/TCP Client	Disabled (default) or Enabled.
	Support (Refer to	Enabling Modbus/TCP Client Support sets the %I00488 status bit ON.
	the VersaMax Nano	
	and Micro PLCs	
	User's Manual, GFK-	
	1645J or later.)	
Pass-Through or	Port Mode	Serial I/O
Tunneling	Data Rate	19.2, 38.4 or 175.0 kbps (default)
	Flow Control	None
	Parity	Odd (default), Even, None
	Stop bits	1 (default), or 2
	Bits/Characters	7 or 8
	Station Address	Valid range:
	(Byte 1 to Byte 8)	0–F. Default=0

\* When the Ethernet Option Module is configured for Modbus/TCP Client, the configured Sequence Number and Command Data addresses should not overlap or conflict with any other variables used in the logic. These addresses are reserved exclusively for communications between the CPU and Ethernet module when initiating Modbus TCP commands.

## **Setting the IP Address**

Key items to remember when setting the IP address on the VersaMax Micro Ethernet module (IC200UEM001):

- The default IP address is 10.10.0.5.
- IP address setting must be saved to the Flash on the Ethernet module or it will be lost during power cycle.
- The second port of the Micro PLC must be configured for Ethernet.

## **Setting the Permanent IP Address**

- 1. Go to C:/ Prompt on your computer and type: Ping [IP address] and press the Enter key. (This step is required to "establish" the ARP table by creating an entry in the table.) The address pinged should reply with Pinged data. (example c:/ Ping 10.10.0.5 and return data)
- 2. Type: *arp* –*a* (space between p and –a). You should see at least one entry in the ARP table. (example c:/ arp –a)
- 3. Type: *arp –s [IP address, including dots] [MAC Address of the Ethernet module, including dashes]*. You will not see any reply on the screen. (example c:/ arp –s 10.10.0.5 00-20-4a-ff-ff-e9)
- 4. Type: *telnet [IP address]* 1 (leave space between IP address and 1) and press the Enter key. You will be prompted that the connection failed. This is normal. (example c:/ telnet 10.10.0.5 1)
- 5. Type: *telnet [IP address] 9999* (leave space between IP address and 9999) and press the Enter key. You will be prompted to Press Enter to go into Setup Mode. You have two seconds to press the Enter key again. If you get the message "Connection to host lost", re-enter *telnet [IP address]* and press the Enter key twice to get to the setup screen. (example c:/ telnet 10.10.0.5 9999)
- 6. Press 1 to change IP address (Enter the desired IP address) and Net Mask
- Press 2 to change Serial Settings. For best performance, set the baud rate to 175000. Setting should be Mode#1, RS232 175000, 8, 0, 1. Port 2 needs to be configured with PAC Machine Edition to match these settings. Machine Edition should configure Port 2 for Ethernet and baud rate of 175000.

When complete, press **S** to save to the Ethernet module. You will see a prompt that informs you **Parameters saved**, **Display will Restart**.... and then **Connection to host lost**. The data is now stored in the internal Flash of the IC200UEM001. You can change the settings by repeating the above steps.

Settings are now complete. Verify that Port 2 matches above configuration by connecting to the Micro PLC serial port and checking hardware configuration.

## **Downloading Ethernet Drivers**

The Ethernet drivers for the Ethernet Option Module are downloaded https://emerson-

mas.my.site.com/communities/CC Home.

Files and passwords are:

Function	Upgrade Kit for Release 3.3	Destination Password
Emerson SRTP	82A1587-MS10-000-B1	G7
Modbus TCP (Client and Server in single firmware)*	82A1588-MS10-000-B3	G7
Tunneling or Pass Thru**	82A1589-MS10-000-B1	G7

\* When the Ethernet option module is loaded with the Modbus image it cannot communicate with PME.

\*\*When the Tunneling image is loaded, the 175000 baud rate is configurable only when the CPU Performance parameter is set to High in Telnet Configurator. The CPU Performance parameter is available in the Expert Setting menu.

Downloading is done using the PumpKIN utility, which is included. To download a driver, perform the following procedure. Only one driver can be present at one time. After the driver has been downloaded you will have to reconfigure the port using Telnet.

### To Download Ethernet Drivers:

1. Before performing the firmware upgrade, make sure TFTP Download is set to Enabled.

Note: Refer to the Security Settings section for more details.

**Important:** Failure to enable TFTP Download before updating firmware can result in damage to device.

2. Open the PumpKIN Utility



#### **Figure 6: PumpKIN Utility**

- 3. If your current firmware version is 3.x, go to step 4. Otherwise go to Step 3 a.
  - a. Click on Put File and select "geamxcupg\_6104.rom" from upgrade kit for release 3.3.
  - b. Enter password G5 (case sensitive, must be upper case G) in Remote file. For Remote host, enter the IP address of the Micro PLC (for example: 10.10.0.2).

Figure 7: G5 Remote Host	
Send file	X
Local file: :\V3.3.0.2\geamxc_3302\geamxcupg_6104.rom Remote file: Type: octet <b>v</b> Block: 1024 G5	69 • •
Remote host:	
10.10.0.2	REFRESH
OK Cancel	

c. When the file is downloaded, the utility will respond with the following.

File	type	e peer	ACK	tsize	Get File
					Put File
					Abortxfe
					Options
					Exit
				1	Help
PumpKIN started Sending 'G5' to '10	.10.0.2'				
Fransfer of 'G5' has	s successfully com	pleted			

#### Figure 8: G5 Successful Download

4. Click on Put File and Local file to be downloaded (Modbus\_TCP).

5. Enter password G7 (case sensitive, must be upper case G) in Remote file. For Remote host, enter the IP address of the Micro PLC (for example: 10.10.0.2)

#### Figure 9: G7 Remote Host

Send file	8
Local file: -MS10-000-B1\Modbus_TCP Server_V3.3.ROM Remote file: Type: octet Block: 1024 G7 Remote boot:	@ 1 -
10.10.0.2	R
	E F R E S H
OK Cancel	

6. When the file is downloaded the utility will respond with the following.

#### Figure 10: G7 Successful Download



- 7. When the transfer is accomplished, go back to Telnet and configure the settings by following the procedure listed under Setting the Permanent IP Address on page 7. Refer to GFK-1645 for more information on configuration options.
- 8. Settings are now complete. Verify that Port 2 matches above configuration by connecting to the Micro PLC serial port and checking hardware configuration.

9. Once the firmware upgrade completes, TFTP Download must be set to **Disabled** to provide the highest level of security to the module.

## **Telnet Configuration**

The Ethernet option module will be power cycled and reset under the following conditions:

- A connection to the Ethernet option module is established through TELNET and disconnected immediately.
- A connection to the Ethernet option module is established through TELNET, the configuration is edited, and you press "Q" (Quit without Save).

## Serial I/O Configurable Parameters

## **Baud Rate**

The supported baud rates are 19200, 38400 and 175000. This baud rate should match the baud rate of the configuration software.

## I/F Mode (Interface Mode)

The Interface (I/F) Mode is a bit-coded byte entered in hexadecimal notation.

The following table displays available I/F Mode options:

**Note:** All bit positions in the table that are blank represent "don't care" bits for that particular option, which can be set to either a 0 or 1 value. Only RS-232C is supported and hence Bit 0 and Bit 1 always should be zeros. If you attempt to select an I/F Mode bit that pertains to RS-422/485 settings, the *WARNING: RS-422/485 I/F Modes Not Supported*" message displays.

I/F Mode Option	7	6	5	4	3	2	1	0
RS-232C							0	0
7 Bit					1	0		
8 Bit					1	1		
No Parity			0	0				
Even Parity			1	1				
Odd Parity			0	1				
1 Stop bit	0	1						
2 stop Bit	1	1						

### **Common Interface Mode Settings**

Common I/F Mode Setting	Binary	Нех
RS-232C, 8-bit, No Parity, 1 stop bit	0100 1100	4C
RS-232C, 7-bit, Even Parity, 1 stop bit	0111 1000	78

### Flow

Flow control sets the local handshaking method for stopping serial input/output. This should be set to zero always.

## Port Number

The setting represents the source port number in TCP connections. It identifies the channel for remote initiating connections. The range is **1-65535**, except for the following.

Port numbers	Reserved for
1-1024	Reserved (well known ports)
9999	TELNET Setup
14000-14009	Reserved for Redirector
30704	Reserved (77F0h)
30718	Reserved (77FEh)

### **WARNING**

Do not use the reserved port numbers for this setting because incorrect operation may result.

## **Connect Mode**

Connect Mode defines how the unit makes a connection, and how it reacts to incoming connections over the network.

Connection Mode Option	7	6	5	4	3	2	1	0
Incoming Connection								
Never accept incoming	0	0	0					
Always accept	1	1	0					
Response								
Nothing (quiet)				0				
Character response				1				
C = Connect,								
D= disconnect,								
N = Unreachable								
Active Startup								
With any character					0	0	0	1

### **Remote IP Address**

This setting specifies the remote IP address through which the communication needs to be established.

### **Remote Port**

The setting represents the destination port number in TCP connections. It is the number that identifies the channel for remote initiating connections.

Note: See the reserved port numbers from the table specified in section.

Port	Setting			
DisConn Mode	Set to zero			
FlushMode	Set to zero			
DisConnTime	Set to zero			
SendChar 1	Set to zero			
SendChar 2	Set to zero			

## Examples

User entries are shown in **bold.** 

# To configure the Modbus/TCP Client in IC200UEM001 through TELNET:

In this example, the current Modbus/TCP serial settings are 38400,8,O,1. The following procedure explains how to change the existing serial parameters to 175000,8,O,1.

- 1. Connect PLC with IC200UEM001 on port2 in the Network.
- 2. For this example, the IP address of the IC200UEM001 is 10.10.0.5
- 3. Load the Ethernet Option Module firmware upgrade kit, 82A1588-MS10-000-B1
- 4. Type **TELNET 10.10.0.5 9999** in the command prompt and press **Enter**. Modbus/TCP to RTU Bridge will appear.

#### Figure 11: Modbus/TCP to RTU Bridge

```
Modbus/TCP to RTU Bridge
MAC address 0080A3EF18E6
Software version V3.3.0.7RC1 (171222) XCARD
Press Enter for Setup Mode
```

5. Press Enter.

6. Press 2 to select Serial & Mode Settings.

#### Figure 12: Selecting Serial & Mode Settings

- 7. Press Enter on Attached Device (1=Slave 2=Master) (1)?
- 8. Press Y on Modbus/TCP Client Enabled (Y)?
- 9. Press Enter on Close Idle TCP sockets after (3-60 sec, 0=leave open) (10).
- 10. Press Enter on Serial Protocol (1=Modbus/RTU 2=Modbus/ASCII) (1).
- 11. Update the new serial parameters to **175000,8,0,1** and press **Enter**.

#### **Figure 13: New Serial Parameters**

Enter serial parameters (38400,8,0,1) 175000,8,0,1

#### Figure 14: Updated Modbus/TCP Client Bridge Serial Parameters



12. Press **S** to save the configuration. The screen will display **Parameters saved, Restarting...** and **Connection to host lost**.

## To change the Serial Parameter Settings in SRTP Protocol

For this example, the current protocol is SRTP and serial settings are 175000,8,O,1. The following procedure explains how to change the existing serial parameters to 38400,8,N,2

For this example, the IP address of the IC200UEM001 is 10.10.0.5

- 1. Connect PLC with IC200UEM001 on port2 in the Network.
- 2. Load SRTP firmware version 82A1587-MS10-000-B1 on the module.

Note: The IC200UEM001 module will have the SRTP firmware by default.

3. Type **TELNET 10.10.0.5 9999** in the command prompt and press **Enter.** The SRTP firmware will display the following.

Figure 15: SRTP Firmware

```
MAC address 0080A3EF1903
Software version V3.3.0.2 (130709) XPTEX
Press Enter for Setup Mode
```

- 4. Press Enter to start Setup Mode.
- 5. Press 2 to select CH1 Serial & Protocol Settings.

Figure 16: Selecting CH1 Serial & Protocol Settings

```
VMSE GE IP-SNP, GE Intelligent Platforms.
1) Network/IP Settings:
    IP Address ...... 10.10.0.5
    Default Gateway ..... --- not set ---
    Netmask ............ --- not set ---
2) CH1 Serial & Protocol Settings:
    Protocol Mode ........ Mode#1 SRTP Ethernet to Serial SNP Slave
    Serial Interface ....... 175000,8,0,1
    T1, Turn-Around Delay ..... 00010 msec
    T2, ACK/NAK Timeout ...... 09000 msec
    T3, Link Idle Timeout ..... 10000 msec
    T4, After Break Delay ..... 00400 msec
    T4, After Break Delay ..... 00400 msec
    SNP ID to IP mapping table (not used in this mode)
    * Debug by Telnet to port 3000
4) Security Settings:
    SNMP ...... Disabled
    TFTP Download ...... Disabled
    TFTP Download ...... Disabled
    Det 77FEh ...... Disabled
    Telnet Config Password .... Disabled
    Telnet Config Password .... Disabled
    Telnet Config Password .... Disabled
    Telnet command or parameter set (1..3) to change:
```

- 6. Press Enter on Select desired operating mode (1)?
- 7. Update the new serial parameters to **38400,8,N,2** and press **Enter**.

#### **Figure 17: New SRTP Serial Parameters**

#### Enter serial parameters (175000,8,0,1) 38400,8,N,2

- 8. Press Enter on New T1, Line Turn-Around Delay (2-1280 msec, 1ms resolution) (2)
- 9. Press Enter on New T2, ACK/NAK Timeout (50-12,950 msec, 50ms resolution) (9000)
- 10. Press Enter on New T3, Link Idle Timeout (1000-60,000 msec, 250ms resolution) (10000)
- 11. Press Enter on New T4, After <BREAK> Delay (5-1280 msec, 5ms resolution) (400). The newly configured parameters will appear.

**Figure 18: Updated SRTP Serial Parameters** 

12. Press **S** to save the configuration. The screen will display **Parameters saved, Restarting...** and **Connection to host lost.** 

## **Security Settings**

**Note:** This information replaces the "Security Settings for the Ethernet Option Module" section in chapter 14 of GFK-1645J and will be included in the next revision of that manual.

Security settings are provided to prevent unauthorized access to the Ethernet Option Module configuration mode.

Five security parameters are supported for the Ethernet Option Module (firmware versions 3.3 and later).

Security settings are provided for the three protocols: SNP/SRTP, Modbus TCP and Tunneling.

These parameters allow you to configure the Telnet password, enable the required ports and disable the unused ports

Figure 19: Security Settings

**Note:** We strongly recommend configuration of the Telnet password and closing the unused ports. This will reduce the exposure to security threats.

These ports are disabled by default. A port must be enabled if the application needs a service associated with that port.

To upgrade firmware, the TFTP Download must be enabled. Be sure to disable TFTP Download after the firmware update has been completed.

To connect with Device Installer, Port 77FE must be enabled.

For use as web server the configuration for Web Server must be enabled.

By default, Simple Network Management Protocol (SNMP) is Disabled.

For Modbus TCP and SRTP protocols, these security settings options are in the "Network/IP Settings" menu. For Tunneling (Passthrough), these security settings are in "basic parameters/server" menu.

The maximum password length is 16 characters. These characters can be alphanumeric or special characters. The password requires a minimum length of 8 characters.

A password set on a protocol's firmware remains in effect if the firmware is changed to that of a different protocol. For example, if a password is set on Modbus TCP firmware and later the firmware is changed to SNP/SRTP, the same password set on Modbus TCP firmware will still apply.

## **General Contact Information**

	http://www.emerson.com/industrial-automation-controls					
se:	https://www.emerson.com/industrial-automation-controls/support					
ical Su	pport					
1-888-565-4155 1-434-214-8532	55 532 (If toll free option is unavailable)					
Customer Care Technical Supp	e (Quotes/Orders/Returns): port:	<u>customercare.mas@emerson.com</u> <u>support.mas@emerson.com</u>				
+800-4444-800 +420-225-379-3	)01 9-328 (If toll free option is unavailable)					
Customer Care Technical Supp	e (Quotes/Orders/Returns): port:	customercare.emea.mas@emerson.com support.mas.emea@emerson.com				
+86-400-842-85 +65-6955-9413	599 (All other Countries)					
Customer Care Technical Supp	e (Quotes/Orders/Returns): port:	<u>customercare.cn.mas@emerson.com</u> <u>support.mas.apac@emerson.com</u>				
	se: <b>ical Su</b> 1-888-565-415! 1-434-214-853: Customer Care Technical Supp +800-4444-800 +420-225-379-3 Customer Care Technical Supp +86-400-842-8! +65-6955-9413 Customer Care Technical Supp	http://www.emerson.com/ind fee: https://www.emerson.com/ind fical Support 1-888-565-4155 1-434-214-8532 (If toll free option is unavailal Customer Care (Quotes/Orders/Returns): Technical Support: +800-4444-8001 +420-225-379-328 (If toll free option is unava Customer Care (Quotes/Orders/Returns): Technical Support: +86-400-842-8599 +65-6955-9413 (All other Countries) Customer Care (Quotes/Orders/Returns): Technical Support:				

Any escalation request should be sent to: mas.sfdcescalation@emerson.com

**Note:** If the product is purchased through an Authorized Channel Partner, please contact the seller directly for any support.

Emerson reserves the right to modify or improve the designs or specifications of the products mentioned in this manual at any time without notice. Emerson does not assume responsibility for the selection, use or maintenance of any product. Responsibility for proper selection, use and maintenance of any Emerson product remains solely with the purchaser.

© 2023 Emerson. All rights reserved.

Emerson Terms and Conditions of Sale are available upon request. The Emerson logo is a trademark and service mark of Emerson Electric Co. All other marks are the property of their respective owners.

