

## **1732E ArmorBlock 2 Port Ethernet Module**

Catalog Numbers 1732E-IB16M12R, 1732E-OB16M12R,  
1732E-IB16M12DR, 1732E-OB16M12DR, 1732E-16CFGM12R,  
1732E-IB16M12SOEDR, 1732E-8X8M12DR

### **About This Publication**

These release notes supplement the existing documentation supplied with your product.

## Communicate with Your Module

This module's I/O is exchanged through a cyclic, or change-of-state connection.

**Cyclic** — The block will produce and consume its I/O cyclically at the rate configured.

**Change-of-State** — Productions occur when an input changes or a fault condition occurs. If no input or fault condition change occurs within the expected packet rate, a heartbeat production occurs. This heartbeat production tells the connection originator that the I/O module is alive and ready to communicate. Consumption occurs when data changes and the connection originator produces new output data to the I/O block.

Refer to the Module Data Definitions tables for more information.

### 1732E-8X8M12DR Data Definitions (Instance 114 - Produced 8 Point Input/Output/Status)

Produced Byte	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
0	Reserved (must be 0)							
1	Reserved (must be 0)							
2	Reserved (must be 0)							
3	Reserved (must be 0)							
4	In7	In6	In5	In4	In3	In2	In1	In0
5	InSC3	InSC2	InSC1	InSC0	InOW3	InOW2	InOW1	InOW0
6	OutNL7	OutNL6	OutNL5	OutNL4	OutNL3	OutNL2	OutNL1	OutNL0
7	OutSC7	OutSC6	OutSC5	OutSC4	OutSC3	OutSC2	OutSC1	OutSC0
8	OutPwr	Reserved						

InOW = Input Open Wire

InSC= Input Short Circuit

OutNL = Output No Load = Output Open Load

OutSC = Output Short Circuit

OutPwr = Auxiliary Output Power Present

### 1732E-8X8M12DR Data Definitions (Instance 134 - Consumed 8 Point Output with Reset)

Consumed Byte	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
0	Out7	Out6	Out5	Out4	Out3	Out2	Out1	Out0
1	Reset7	Reset6	Reset5	Reset4	Reset3	Reset2	Reset1	Reset0

Reset = Reset latched output and status.

### 1732E-8X8M12DR Data Definitions (Instance 106 — Configuration 8 Input/8 Output/Status)

Config Byte	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
0	Reserved							CRN
1	Reserved							
2	Reserved							
3	Reserved							
4	Group 0 Input OFF_ON Delay Filter (Low Byte)							
5	Group 0 Input OFF_ON Delay Filter (High Byte)							
6	Group 0 Input ON_OFF Delay Filter (Low Byte)							
7	Group 0 Input ON_OFF Delay Filter (High Byte)							
8	O-LTCH	Reserved			IV_G0	IA_G0	FV_G0	FA_G0
9	Reserved	Reserved	Reserved	Reserved	Enable In OW3	Enable In OW2	Enable In OW1	Enable In OW0
6	EN OutNL7	EN OutNL6	EN OutNL5	EN OutNL4	EN OutNL3	EN OutNL2	EN OutNL1	EN OutNL0
7	Pad Byte (Reserved)							

### 1732E-8X8M12DR Data Definitions (Instance 106 — Configuration 8 Input/8 Output/Status)

Config Byte	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
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CRN = Configuration Revision Number. Value is 0 after power-on reset and after completely closing the connection. Value is 1 when the module is configured. Once a module is configured, the only way to change its configuration is to close the connections to it or use the override value of 0.

FA\_Gx = Fault Action Group x. 0 = Apply Fault Value, 1 = Hold Last State

IA\_Gx = Idle Action Group x. 0 = Apply Idle Value, 1 = Hold Last State

FV\_Gx = Fault Value Group x. 1 = On, 0 = Off

IV\_Gx = Idle Value Group x. 1 = On, 0 = Off

O\_LTCH = Output Diagnostic Latch. 0 = Auto Reset, 1 = Latch

En OutNLx = Enable Output No (Open) Load x. 1 = Enable, 0 = Off

Enable In OWx = Enable Input Open Wire x. 1 = Enable, 0 = Off

Input Filter values = 0, 1000, 2000, 4000, 8000, or 16000 microseconds.

### 1732E-IB16M12DR Data Definitions (Instance 115 — Produced 16 Point Input/Status)

Produced Byte	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
0	Reserved (must be 0)							
1	Reserved (must be 0)							
2	Reserved (must be 0)							
3	Reserved (must be 0)							
4	In7	In6	In5	In4	In3	In2	In1	In0
5	In15	In14	In13	In12	In11	In10	In9	In8
6	InOW7	InOW6	InOW5	InOW4	InOW3	InOW2	InOW1	InOW0
7	InSC7	InSC6	InSC5	InSC4	InSC3	InSC2	InSC1	InSC0

InOW = Input Open Wire

InSC= Input Short Circuit

### 1732E-IB16M12DR Data Definitions (Instance 107 — Configuration 16 Input/Status)

Config Byte	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
0	Reserved							CRN
1	Reserved							
2	Reserved							
3	Reserved							
4	Group 0 Input OFF_ON Delay Filter (Low Byte)							
5	Group 0 Input OFF_ON Delay Filter (High Byte)							
6	Group 0 Input ON_OFF Delay Filter (Low Byte)							
7	Group 0 Input ON_OFF Delay Filter (High Byte)							
8	Enable In OW7	Enable In OW6	Enable In OW5	Enable In OW4	Enable In OW3	Enable In OW2	Enable In OW1	Enable In OW0
9	Pad Byte (Reserved)							

CRN = Configuration Revision Number. Value is 0 after power-on reset and after completely closing the connection. Value is 1 when the module is configured. Once a module is configured, the only way to change its configuration is to close the connections to it or use the override value of 0.

Enable In OWx = Enable Input Open Wire x. 1 = Enable, 0 = Off

Input Filter values = 0, 1000, 2000, 4000, 8000 or 16000 microseconds.

### 1732E-IB16M12R Data Definitions (Instance 5 — Produced 16 Point Input)

Produced Byte	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
0	In7	In6	In5	In4	In3	In2	In1	In0
1	In15	In14	In13	In12	In11	In10	In9	In8

### 1732E-IB16M12R Data Definitions (Instance 101 — Configuration Input Only)

Config Byte	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
0	Reserved							CRN
1	Reserved							
2	Reserved							
3	Reserved							
4	Group 0 Input OFF_ON Delay Filter (Low Byte)							
5	Group 0 Input OFF_ON Delay Filter (High Byte)							
6	Group 0 Input ON_OFF Delay Filter (Low Byte)							
7	Group 0 Input ON_OFF Delay Filter (High Byte)							

CRN = Configuration Revision Number. Value is 0 after power-on reset and after completely closing the connection. Value is 1 when the module is configured. Once a module is configured, the only way to change its configuration is to close the connections to it or use the override value of 0. Input Filter values = 0, 1000, 2000, 4000, 8000, or 16000 microseconds.

### 1732E-OB16M12DR Data Definitions (Instance 116 — Produced 16 Point Output Status)

Produced Byte	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
0	Reserved (must be 0)							
1	Reserved (must be 0)							
2	Reserved (must be 0)							
3	Reserved (must be 0)							
4	OutNL7	OutNL6	OutNL5	OutNL4	OutNL3	OutNL2	OutNL1	OutNL0
5	OutNL15	OutNL14	OutNL13	OutNL12	OutNL11	OutNL10	OutNL9	OutNL8
6	OutSC7	OutSC6	OutSC5	OutSC4	OutSC3	OutSC2	OutSC1	OutSC0
7	OutSC15	OutSC14	OutSC13	OutSC12	OutSC11	OutSC10	OutSC9	OutSC8
8	OutPwr	Reserved						

OutSC = Output Short Circuit

OutPwr = Auxiliary Output Power Present

OutNL = Output No Load = Output Open Load

### 1732E-OB16M12DR Data Definitions (Instance 135 — Consumed 16 Point Output with Reset)

Consumed Byte	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
0	Out7	Out6	Out5	Out4	Out3	Out2	Out1	Out0
1	Out15	Out14	Out13	Out12	Out11	Out10	Out9	Out8
2	Reset7	Reset6	Reset5	Reset4	Reset3	Reset2	Reset1	Reset0
3	Reset15	Reset14	Reset13	Reset12	Reset11	Reset10	Reset9	Reset8

Reset = Reset latched output and status.

### 1732E-OB16M12DR Data Definitions (Instance 108 — Configuration 16 Output with Status)

Config Byte	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
0	Reserved							CRN
1	Reserved							
2	Reserved							
3	Reserved							
4	EN OutNL7	EN OutNL6	EN OutNL5	EN OutNL4	EN OutNL3	EN OutNL2	EN OutNL1	EN OutNL0
5	EN OutNL15	EN OutNL14	EN OutNL13	EN OutNL12	EN OutNL11	EN OutNL10	EN OutNL9	EN OutNL8
6	O_LTCH	Reserved			IV_G0	IA_G0	FV_G0	FA_G0
7	Pad Byte (Reserved)							

CRN = Configuration Revision Number. Value is 0 after power-on reset and after completely closing the connection. Value is 1 when the module is configured. Once a module is configured, the only way to change its configuration is to close the connections to it or use the override value of 0.

FA\_Gx = Fault Action Group x. 0 = Apply Fault Value, 1 = Hold Last State

IA\_Gx = Idle Action Group x. 0 = Apply Idle Value, 1 = Hold Last State

FV\_Gx = Fault Value Group x. 0= Off, 1=On

IV\_Gx = Idle Value Group x. 0= Off, 1=On

O\_LTCH = Output Diagnostic Latch. 0 = Auto Reset, 1 = Latch

EN OutNLx = Enable Output No (Open) Load x. 1 = Enable, 0 = Off

### 1732E-OB16M12R Data Definitions (Instance 35 — Consumed 16 Point Output)

Consumed Byte	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
0	Out7	Out6	Out5	Out4	Out3	Out2	Out1	Out0
1	Out15	Out14	Out13	Out12	Out11	Out10	Out9	Out8

### 1732E-OB16M12R Data Definitions (Instance 100 — Configuration Output only)

Config Byte	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
0	Reserved							CRN
1	Reserved							
2	Reserved							
3	Reserved							
4	Reserved				IV_G0	IA_G0	FV_G0	FA_G0
5	Reserved (pad)							

CRN = Configuration Revision Number. Value is 0 after power-on reset and after completely closing the connection. Value is 1 when the module is configured. Once a module is configured, the only way to change its configuration is to close the connections to it or use the override value of 0.

FA\_Gx = Fault Action Group x. 0 = Apply Fault Value, 1 = Hold Last State

IA\_Gx = Idle Action Group x. 0 = Apply Idle Value, 1 = Hold Last State

FV\_Gx = Fault Value Group x. 0= Off, 1= On

IV\_Gx = Idle Value Group x. 0= Off, 1= On

### 1732E-16CFGM12R Data Definitions (Instance 5 — Produced 16 Point Input)

Produced Byte	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
0	In7	In6	In5	In4	In3	In2	In1	In0
1	In15	In14	In13	In12	In11	In10	In9	In8



### 1732E-16CFGM12R Data Definitions (Instance 35 — Consumed 16 Point Output)

Consumed Byte	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
0	Out7	Out6	Out5	Out4	Out3	Out2	Out1	Out0
1	Out15	Out14	Out13	Out12	Out11	Out10	Out9	Out8

### 1732E-16CFGM12R Data Definitions (Instance 102 — Configuration Input/Output)

Config Byte	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
0	Reserved							CRN
1	Reserved							
2	Reserved							
3	Reserved							
4	Group 0 Input OFF_ON Delay Filter (Low Byte)							
5	Group 0 Input OFF_ON Delay Filter (High Byte)							
6	Group 0 Input ON_OFF Delay Filter (Low Byte)							
7	Group 0 Input ON_OFF Delay Filter (High Byte)							
8	Reserved				IV_G0	IA_G0	FV_G0	FA_G0
9	Reserved (pad)							

CRN = Configuration Revision Number. Value is 0 after power-on reset and after completely closing the connection. Value is 1 when the module is configured. Once a module is configured, the only way to change its configuration is to close the connections to it or use the override value of 0.

FA\_Gx = Fault Action Group x. 0 = Apply Fault Value, 1 = Hold Last State

IA\_Gx = Idle Action Group x. 0 = Apply Idle Value, 1 = Hold Last State

FV\_Gx = Fault Value Group x. 0= Off, 1=On

IV\_Gx = Idle Value Group x. 0= Off, 1=On

Input Filter values = 0, 1000, 2000, 4000, 8000, or 16000 microseconds.

### 1732E-IB16M12SOEDR Data Definitions (Instance 118 — Produced 16 Point Input/Status/CIP Sync - Per Point)

Produced Byte	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
0	Reserved (must be 0)							
1	Reserved (must be 0)							
2	Reserved (must be 0)							
3	Reserved (must be 0)							
4	In7	In6	In5	In4	In3	In2	In1	In0
5	In15	In14	In13	In12	In11	In10	In9	In8
6	InOW7	InOW6	InOW5	InOW4	InOW3	InOW2	InOW1	InOW0
7	InSC7	InSC6	InSC5	InSC4	InSC3	InSC2	InSC1	InSC0
8	NewData 7	NewData 6	NewData 5	NewData 4	NewData 3	NewData 2	NewData 1	NewData 0
9	NewData 15	NewData 14	NewData 13	NewData 12	NewData 11	NewData 10	NewData 9	NewData 8
10	EventOV7	EventOV6	EventOV5	EventOV4	EventOV3	EventOV2	EventOV1	EventOV0
11	EventOV15	EventOV14	EventOV13	EventOV12	EventOV11	EventOV10	EventOV9	EventOV8
12-15	Event number (32 bit)							
16-23	Local Clock Offset (64 bit)							
24-31	Offset Time Stamp (64 bit)							
32-39	Grandmaster Clock ID (64 bit) 8 byte SINT array							
40-47	In0 Off-On Time Stamp (64 bit)							
48-55	In0 On-Off Time Stamp (64 bit)							
56-63	In1 Off-On Time Stamp (64 bit)							
64-71	In1 On-Off Time Stamp (64 bit)							
72-79	In2 Off-On Time Stamp (64 bit)							
80-87	In2 On-Off Time Stamp (64 bit)							
88-95	In3 Off-On Time Stamp (64 bit)							
96-103	In3 On-Off Time Stamp (64 bit)							

**1732E-IB16M12SOEDR Data Definitions**  
**(Instance 118 — Produced 16 Point Input/Status/CIP Sync - Per Point)**

<b>Produced Byte</b>	<b>Bit 7</b>	<b>Bit 6</b>	<b>Bit 5</b>	<b>Bit 4</b>	<b>Bit 3</b>	<b>Bit 2</b>	<b>Bit 1</b>	<b>Bit 0</b>
104-111	In4 Off-On Time Stamp (64 bit)							
112-119	In4 On-Off Time Stamp (64 bit)							
120-127	In5 Off-On Time Stamp (64 bit)							
128-135	In5 On-Off Time Stamp (64 bit)							
136-143	In6 Off-On Time Stamp (64 bit)							
144-151	In6 On-Off Time Stamp (64 bit)							
152-159	In7 Off-On Time Stamp (64 bit)							
160-167	In7 On-Off Time Stamp (64 bit)							
167-175	In8 Off-On Time Stamp (64 bit)							
176-183	In8 On-Off Time Stamp (64 bit)							
184-191	In9 Off-On Time Stamp (64 bit)							
192-199	In9 On-Off Time Stamp (64 bit)							
200-207	In10 Off-On Time Stamp (64 bit)							
208-215	In10 On-Off Time Stamp (64 bit)							
216-223	In11 Off-On Time Stamp (64 bit)							
224-231	In11 On-Off Time Stamp (64 bit)							
232-239	In12 Off-On Time Stamp (64 bit)							
240-247	In12 On-Off Time Stamp (64 bit)							
248-255	In13 Off-On Time Stamp (64 bit)							
256-263	In13 On-Off Time Stamp (64 bit)							
264-271	In14 Off-On Time Stamp (64 bit)							
272-279	In14 On-Off Time Stamp (64 bit)							
280-287	In15 Off-On Time Stamp (64 bit)							
288-295	In15 On-Off Time Stamp (64 bit)							
296	Reserved							Synced to Master

### 1732E-IB16M12SOEDR Data Definitions (Instance 118 — Produced 16 Point Input/Status/CIP Sync - Per Point)

Produced Byte	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
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InOW = Input Open Wire

InSC= Input Short Circuit

NewData = New data has been detected upon that input and an unread event is queued for that point.

EventOV = Set whenever the module begins to lose events for that input point. Events may be lost when new events are either ignored or overwriting existing events which have yet to be acknowledged.

EventNumber = Running count of events which increments by one for each new event. Allows the controller to easily check for a new event by comparing this number to the last retrieved event. If the EventNumber reaches its maximum value and rolls over, it will rollover to 1, not 0.

Inx Off-On Time Stamp = Timestamp corresponding to when an event was recorded at one of the module's inputs when the input transitioned from Off to On. .

Inx On-Off Time Stamp = Timestamp corresponding to when an event was recorded at one of the module's inputs when the input transitioned from On to Off. .

Local Clock Offset = The offset from the local clock to the system time. This value is useful for detecting steps in time. This value will update when a PTP update is received.

Offset Time Stamp = The time when the PTP message was received that caused the Local Clock Offset to update. This value is initially zero, and the first timestamp occurs when the module synchronizes with the master clock.

Grandmaster Clock ID = The ID number of the Grandmaster clock the module is synchronized to.

Synced to Master = 1 indicates the module is synchronized with a master clock. 0 indicates it is not.

In order to acknowledge receipt of an event, the user must transition the corresponding NewDataAck bit from 0 to 1, and set EventAck to indicate the acknowledgement of the Off-On or On-Off transition for the input. The NewDataAck bits and EventAck are in consumed assembly 139.

Time stamps are zero at power-up and after a time-stamp is acknowledged. The time base and epoch of the timestamps are determined by the grandmaster clock of the system.

All data listed in this assembly is in Little Endian format, LSB first, in increasing byte order to MSByte last.

### 1732E-IB16M12SOEDR Data Definitions (Instance 139 — Consumed CIP Sync)

Consumed Byte	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
0-3	Event Ack (32 bit)							
4	NewData Ack7	NewData Ack6	NewData Ack5	NewData Ack4	NewData Ack3	NewData Ack2	NewData Ack1	NewData Ack0

### 1732E-IB16M12SOEDR Data Definitions (Instance 139 — Consumed CIP Sync)

Consumed Byte	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
5	NewData Ack15	NewData Ack14	NewData Ack13	NewData Ack12	NewData Ack11	NewData Ack10	NewData Ack9	NewData Ack8
6	Point To Retrieve							
7	Reserved						Retrieve By Point	Reset Events

EventAck = Is a 0 or 1 to indicate acknowledging an OnOff or OffOn event respectively, or a 2 to acknowledge both.

NewDataAck = When transitioned from 0 to 1, acknowledges the corresponding input's timestamp and clears its NewData and EventOV bits in produced instance 118. EventAck determines which OffOn and/or OnOff time stamps are acknowledged by the NewDataAck bits.

Point To Retrieve = Not used.

Retrieve by Point = Not used.

Reset Events = When transitioned from 0 to 1, erases all recorded time stamped events.

### 1732E-IB16M12SOEDR Data Definitions (Instance 110 — Configuration Input/Status/CIP Sync)

Config Byte	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
0	Reserved							CRN
1	Reserved							
2	Reserved							
3	Reserved							
4	Group 0 Input OFF_ON Delay Filter (Low Byte)							
5	Group 0 Input OFF_ON Delay Filter (High Byte)							
6	Group 0 Input ON_OFF Delay Filter (Low Byte)							
7	Group 0 Input ON_OFF Delay Filter (High Byte)							
8	Enable InOW7	Enable InOW6	Enable InOW5	Enable InOW4	Enable InOW3	Enable InOW2	Enable InOW1	Enable InOW0
9	Reserved						Master Sync Enable	Latch Events
10	Capture OffOn7	Capture OffOn6	Capture OffOn5	Capture OffOn4	Capture OffOn3	Capture OffOn2	Capture OffOn1	Capture OffOn0

### 1732E-IB16M12SOEDR Data Definitions (Instance 110 — Configuration Input/Status/CIP Sync)

Config Byte	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
11	Capture OffOn15	Capture OffOn14	Capture OffOn13	Capture OffOn12	Capture OffOn11	Capture OffOn10	Capture OffOn9	Capture OffOn8
12	Capture OnOff7	Capture OnOff6	Capture OnOff5	Capture OnOff4	Capture OnOff3	Capture OnOff2	Capture OnOff1	Capture OnOff0
13	Capture OnOff15	Capture OnOff14	Capture OnOff13	Capture OnOff12	Capture OnOff11	Capture OnOff10	Capture OnOff9	Capture OnOff8

CRN = Configuration Revision Number. Value is 0 after power-on reset and after completely closing the connection. Value is 1 when the module is configured. Once a module is configured, the only way to change its configuration is to close the connections to it or use the override value of 0.

Enable In OWx = Enable Input Open Wire x. 1 = Enable, 0 = Off

LatchEvents = When set, latches events which means that an event will not be overwritten until acknowledged. For example, this means that an input's sequence of events of Off, On, Off, On will cause the first Off to On transition to be recorded, and the final Off to On transition to be ignored. All subsequent transitions on that point will be ignored until acknowledged/reset. If the bit is not set, the new Off to On transition will overwrite the first Off to On transition event immediately, even if the controller has yet to extract that data.

MasterSyncEnable = This is a PTP enable bit, which indicates if the module is expected to sync to a master clock. If not enabled (0), then the Module LED does not flash green if we are not sync'ed to a master clock. Disabling the bit does not prevent the module from synchronizing to a master clock.

CaptureOffOn = Enables capturing Off to On events on a per point basis. If cleared, that point will not record Off to On events. This is useful for not using up buffer space on events the user does not care about.

CaptureOnOff = Enables capturing On to Off events on a per point basis. If cleared, that point will not record On to Off events. This is useful for not using up buffer space on events the user does not care about.

Input Filter values = 0, 1000, 2000, 4000, 8000, or 16000 microseconds.

## **Notes:**

## Rockwell Automation Support

Rockwell Automation provides technical information on the Web to assist you in using its products. At <http://support.rockwellautomation.com>, you can find technical manuals, a knowledge base of FAQs, technical and application notes, sample code and links to software service packs, and a MySupport feature that you can customize to make the best use of these tools.

For an additional level of technical phone support for installation, configuration, and troubleshooting, we offer TechConnect support programs. For more information, contact your local distributor or Rockwell Automation representative, or visit <http://support.rockwellautomation.com>.

## Installation Assistance

If you experience a problem within the first 24 hours of installation, please review the information that's contained in this manual. You can also contact a special Customer Support number for initial help in getting your product up and running.

United States	1.440.646.3434 Monday – Friday, 8 a.m. – 5 p.m. EST
Outside United States	Please contact your local Rockwell Automation representative for any technical support issues.

## New Product Satisfaction Return

Rockwell Automation tests all of its products to ensure that they are fully operational when shipped from the manufacturing facility. However, if your product is not functioning and needs to be returned, follow these procedures.

United States	Contact your distributor. You must provide a Customer Support case number (see phone number above to obtain one) to your distributor in order to complete the return process.
Outside United States	Please contact your local Rockwell Automation representative for the return procedure.

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