

System **Auto Cycling** SYS AUTOCYCLE **BIT 3.4**

Auto Sequence

WORD 9



Trusted Brands Meeting Your Control Needs

Tried-and-true solutions, Centurion C5 and Rockwell Automation come together to provide the flexibility you need for your control panels.

Pairing these powerful products allows you to utilize Rockwell Automation's versatile programming with FW Murphy's Centurion I/O modules (C5/MX4/MX5) dense I/O count and flexibility to create control solutions that combine the advantages of both products.

Simply add FW Murphy's C5 and MX modules to an Allen-Bradley Logix-based CPU solution and program in IEC 61131-3 languages including ladder logic to merge the best of both worlds.

NO COMPROMISES ON PROGRAMMING REQUIREMENTS

- Centurion I/O modules interface with Rockwell Automation's software directly
- No need to learn new software tools and languages to make modifications
- Configure all channels via RSLogix 5000/Studio 5000 I/O configuration interface
- Seamless transfer from traditional PLC design to hybrid design
- Rockwell Automation firmware present on all Centurion modules out of the box

ROBUST FEATURES

- Fit-for-purpose I/O
- Wide operational temperature (-40°F to 185°F)
- Meets worldwide hazardous area requirements
- Inputs are intrinsically safe (Zone 2) and non-incendive

INCREASED FLEXIBILITY

- Saves valuable real estate in panel
- Allows direct wiring (signal and power / common) to removable terminals
- Ideal for local and distributed I/O configurations
- Device Level Ring (DLR), Linear and Star network topologies supported
- Economical solution

CENTURION









C5 Series I/O Module

- Operating temperature: -40° to 185° F (-40° to 85° C)
- Power input: 30 W max 10-30 VDC
- All I/O options individually software selectable: No jumpers
- 12 Analog inputs*:
 - 0-24 mA or 0-5 VDC, 15-bit hardware
 - 4 Configurable for resistive potentiometer measurement
- 32 Digital inputs*: (with LED indicators)
 - NO or NC (active high/active low) intrinsically safe
 - Optically isolated DC digital inputs (active high/active low)
 - Polarity sense/wire fault detection on normally closed systems
 - Hazardous areas approved for use with general purpose switches
- 8 Temperature inputs*:
 - J or K Type Thermocouples
 - 3-wire 100Ω Pt RTD temperature inputs***
 - Open, short DC-, short DC+ wire fault detection
 - Cold junction compensation
- 1 Magnetic pickup input/AC run signal:
 - 30 to 10 kHz, 4.5 VAC rms min, 120 VAC rms max.
- 10 Digital outputs: (with LED indicators)
 - 4 Relay outputs, form C, dry contacts
 - 4 FET outputs (source)
 - 2 FET outputs (sink)
- 4 Analog outputs:
 - 4-20 mA, 16-bit hardware

• Communication ports:

- 2 Ethernet 10/100 (DLR), Single MAC ID:
 - ► EtherNet/IP (CIP)
- Third-party approvals:
- North America:
- Class 1, Div 2, Grps A, B, C, D Haz. Loc. T4
- Class I, Zone 2, AEx ec [ic] nC IIC T4 Gc Ex ec [ic] nC IIC T4 Gc X
- ATEX Zone 2

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-40°C ≤ Tamb ≤ +85°C

- IECEx Zone 2

Ex ec [ic] nC IIC T4 Gc

IECEx UL 18.0072X

-40°C ≤ Tamb ≤ +85°C



MX4-R2 I/O Module

- Operating Temperature: -40° to 185° F (-40° to 85° C)
- Power input: 14.1 W max 10-30 VDC
- 18† Thermocouple inputs*: J or K Type thermocouples
- 9† 3-wire 100Ω Pt RTD temperature inputs*,***
- Open, short DC-, Short DC+ wire fault detection
- Cold junction compensation
- 1 MPU input* / AC Run Signal: 4.5 VAC, 120 VAC, 30 Hz 10 kHz
- Communication ports:
 - 2 Ethernet 10/100 (DLR), Single MAC ID:
 - ► EtherNet/IP (ČIP)
- Third-party approvals:
- North America:
- Class 1, Div 2, Grps A, B, C, D Haz. Loc. T4
- Class I, Zone 2, AEx ec [ic] nC IIC T4 Gc Ex ec [ic] nC IIC T4 Gc X

- ATEX Zone 2 II 3G Ex ec [ic] nC IIC T4 Gc DEMKO 18 ATEX 1926X

-40°C ≤ Tamb ≤ +85°C

- IECEx Zone 2

Ex ec [ic] nC IIC T4 Gc IECEx UL 18.0072X -40°C ≤ Tamb ≤ +85°C



MX5-R2 I/O Module

- Operating Temperature: -40° to 185° F (-40° to 85° C)
- Power input: 14.1 W max 10-30 VDC
- 24 Digital inputs*: (with LED indicators)
- NO or NC (active high/active low) intrinsically safe
- Optically isolated DC digital inputs (active high/active low)
- Polarity sense/wire fault detection on normally closed systems
- Hazardous areas approved for use with general purpose switches
- 10 Analog inputs*: 0-24 mA or 0-5 VDC, 15 bit hardware
- 16 Digital outputs: FET (sink)
- 4 Analog outputs: 4-20 mA, 16 bit hardware
- 1 MPU input* / AC Run Signal: 4.5 VAC, 120 VAC, 30 Hz, 10 kHz
- · Communication ports:
- 2 Ethernet 10/100 (DLR), Single MAC ID:
 - ► EtherNet/IP (CIP)

• Third-party approvals:

- North America:
- Class 1, Div 2, Grps A, B, C, D Haz. Loc. T4
- Class I, Zone 2, AEx ec [ic] nC IIC T4 Gc Ex ec [ic] nC IIC T4 Gc X

- ATEX Zone 2 II 3G Ex ec [ic] nC IIC T4 Gc DEMKO 18 ATEX 1926X
- IECEx Zone 2

Ex ec [ic] nC IIC T4 Gc IECEx UL 18.0072X

-40°C ≤ Tamb ≤ +85°C

-40°C ≤ Tamb ≤ +85°C



^{*} Non-incendive. (Digital Inputs, Analog Inputs and Temperature Inputs are intrinsically safe and non-incendive.)

^{***} RTD= Resistive Temperature Device, American RTD Standard, TCR 0.00392, units Ohms/Ohm / deg. between 0-100°C.

[†] When configured for an RTD channel, two consecutive odd/even T/C channels are consumed.