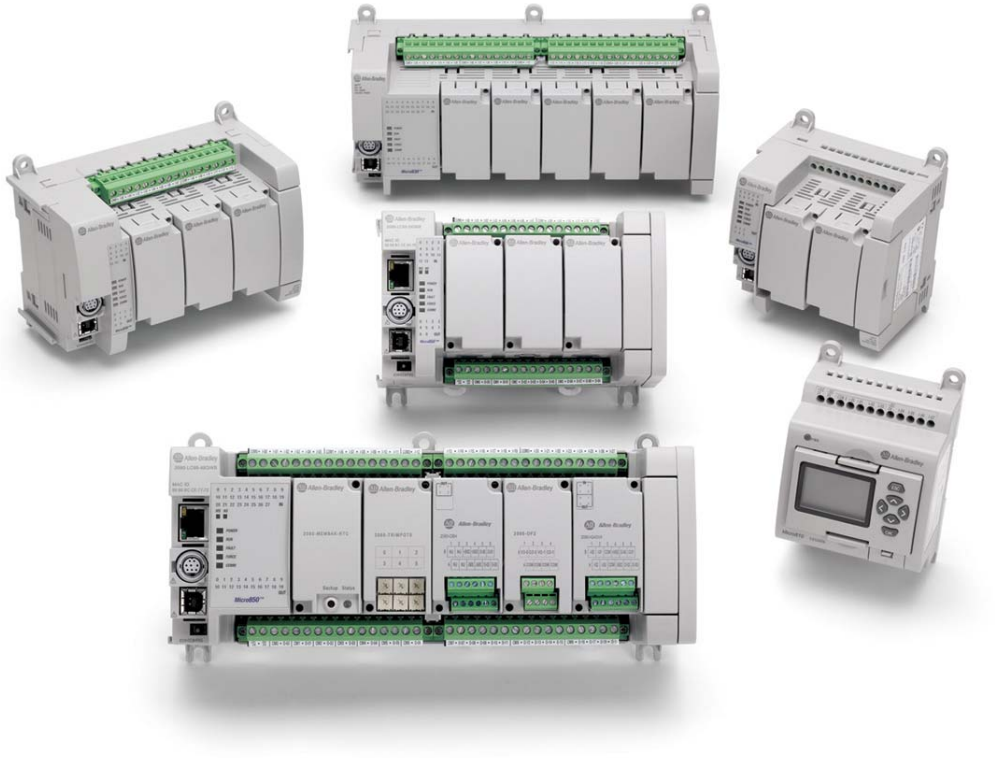
Select a Micro800 Controller



Micro800™ controllers are designed for low-cost, standalone machines. These economical small-size PLCs are available in different form factors based on the number of I/O points embedded in the base, with a range of features intended to address different requirements. The Micro800 family shares programming environment, accessories and plug-ins that allow machine builders to personalize the controller for specific capabilities.

Micro810™ controllers function as a smart relay with high current relay outputs, but with the programming capabilities of a micro PLC. The Micro810 controllers come in a 12-point form factor.

Micro820™ controllers are specifically designed for smaller standalone machines and remote automation projects. It has embedded Ethernet and serial ports and a microSD™ slot for datalogging and recipe management. These controllers come as 20-point form factors that can accommodate up to two plug-in modules. It also supports the Micro800 Remote LCD (2080-REMLCD) module to allow easier configuration of such settings as IP address and functions as a simple IP65 text display.

Publication 2080-SG001D-EN-P - December 2013

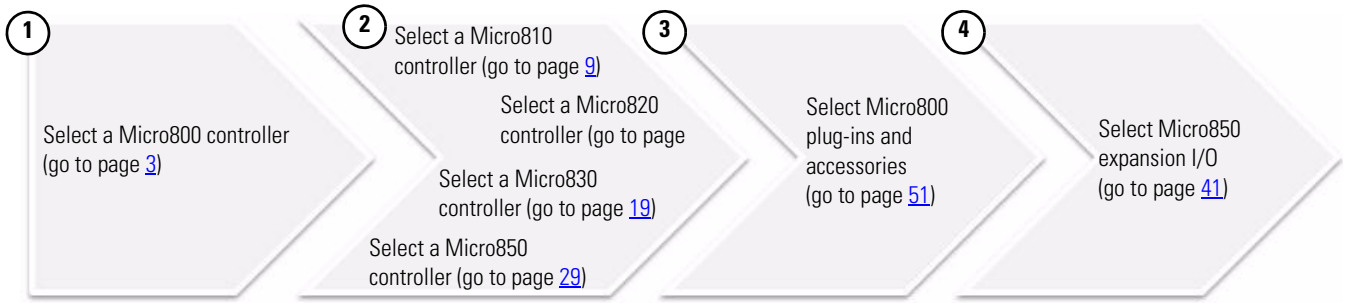
Micro830™ controllers are designed for standalone machine control applications. They have flexible communications and I/O capabilities with up to five plug-ins. They come as a 10-, 16-, 24-, or 48-point form factors.

Micro850™ expandable controllers are designed for applications that require more digital and analog I/O or higher performance analog I/O. They can support up to four expansion I/O. Micro850 controllers include additional communication connection options through an embedded 10/100 Base-T Ethernet port.

Several Micro830 and Micro850 controllers support basic positioning through embedded pulse train outputs (PTO). These controllers also allow you to configure up to six high speed counters (HSC), and choose from nine HSC operation modes. HSC is supported on all Micro830 and Micro850 catalogs, except on 2080-LCxx-xxAWB. PTO is only supported on Micro830 and Micro850 catalog numbers that end in BB or VB.

This selection guide serves to help you identify the right controller, plug-ins, expansion I/O, and accessories, based on your requirements.

Choose a Micro800 Controller



Micro800 Controllers Comparison

Features

Attribute	Micro810	Micro820	Micro830				Micro850	
	12-point	20-point	10-point	16-point	24-point	48-point	24-point	48-point
Communication ports, embedded	USB 2.0 (with USB adapter)	10/100 Base T Ethernet port (RJ-45) RS232/RS485 non-isolated combo serial	USB 2.0 (non-isolated) RS232/RS485 non-isolated combo serial				USB 2.0 (non-isolated) RS232/RS485 non-isolated combo serial 10/100 Base T Ethernet port (RJ-45)	
Embedded digital I/O points(1)	12	19	10	16	24	48	24	48
Base analog I/O channels	Four 24V DC digital inputs are shared as 0…10V analog inputs (DC input models only)	One 0…10V analog output Four 24V DC digital inputs can be configured as 0…10V analog inputs (DC input models only) and via plug-in modules	Via plug-in modules				Via plug-in modules and expansion I/O	
Number of plug-in modules	0	2	2	2	3	5	3	5
Maximum digital I/O(2)	12	35	26	32	48	88	132	
Types of accessories or plug-ins supported	• LCD display with backup memory module • USB adapter	• Micro800 Remote LCD (2080-REMLCD) • All-plug-in modules except 2080-MEMBAK-RTC (see page 51)	All plug-in modules (see page 51)					
Expansion I/O supported	—	—	—				All expansion I/O modules (see page 41)	
Power supply	Embedded 120/240V AC and 12/24V DC options	Base unit has embedded 24V DC power supply, optional external 120/240V AC power supply available						
Basic instruction speed	2.5 µs per basic instruction	0.30 µs per basic instruction						
Minimum scan/cycle time(3)	<0.25 ms	<4 ms	<0.25 ms					
Software	Connected Components Workbench							

(1) See Number and Types of Inputs/Outputs for Micro810, Micro820, Micro830, and Micro850 Catalogs on page 6.

(2) For Micro820 and Micro830 controllers, the number of maximum digital I/O assumes 8-point digital I/O plug-ins (for example, 2080-IQ4OB4) are used on all available plug-in slots. For Micro850 controllers, the maximum number of digital I/O supported between the base, plug-ins, and expansion I/O is 132.

(3) Including reading and writing I/O, program execution, and communications overhead.

Micro800 Controller Programming Comparison (with Connected Components Workbench)

Attribute	Micro810 12-point	Micro820 20-point	Micro830 10/16-point	Micro830 24-point	Micro830 48-point	Micro850 24-point	Micro850 48-point
Program steps(1)	2 K	10 K	4 K	10 K	10 K	10 K	10 K
Data bytes	2 KB	20 KB	8 KB	20 KB	20 KB	20 KB	20 KB
IEC 61131-3 languages	Ladder diagram, function block diagram, structured text						
User defined function blocks	Yes						
Floating point	32-bit and 64-bit						
PID Loop Control	Yes (number limited only by memory)						
Embedded serial port protocols	None	Modbus RTU Master/Slave, ASCII/Binary, CIP Serial					

(1) Estimated Program and Data size are "typical" – program steps and variables are created dynamically. 1 Program Step = 12 data bytes. The number of bytes per instruction can vary greatly from program to program and from programming language to programming language.

Micro800 Communication Options

Controller	USB programming port	Embedded Serial Port, Serial Port Plug-In			Embedded Ethernet	
		CIP Serial	Modbus RTU	ASCII/Binary	EtherNet/IP	Modbus TCP
Micro810	Yes (with adapter)	No				
Micro820	Yes (with 2080-REMLCD)	Yes	Master/Slave	Yes	Yes	Yes
Micro830	Yes	Yes	Master/Slave	Yes	No	No
Micro850	Yes	Yes	Master/Slave	Yes	Yes	Yes

Micro800 Controllers Analog I/O and TC/RTD Comparison

Attribute	Micro810	Micro820	Micro800 (with plug-ins)	Micro850 (with expansion I/O)
Performance level	LOW	LOW	MEDIUM	HIGH
Isolation to controller (increased noise immunity)	None	None	None	Yes
Resolution and Nominal Accuracy	Analog Input: 10-bit, 5% (2% with calibration)	Analog I/O: 12-bit, 5% (2% with calibration)	Analog I/O: 12-bit, 1% TC/RTD: ±1 °C CJC for TC: ±1.2 °C	Analog Input: 14-bit input, ±0.1% Analog Output: 12-bit output, 0.133%, current, 0.425% voltage TC: ±0.5 … ±3.0 °C RTD: ±0.2 … ±0.6 °C
Input update rate and filtering	Update rate only dependent on program scan, limited filtering	Update rate only dependent on program scan, limited filtering	200 ms/ch, 50/60 Hz filtering	8 ms all channels with or without 50/60 Hz filtering
Recommended maximum shielded cable length(1)	10 m			100 m

(1) These numbers are guidelines only. Maximum cable length is dependent on the application and other factors such as cable type, installation, required accuracy, sensor, and so on.

Micro800 Power Requirements(1)

Controller/Module	Power Requirement
Micro810 12-point (with or without LCD)	3 W (5V A for AC module)
Micro820 20-point(2) (without plug-ins, max)	5.62 W
Micro830 and Micro850 (without plug-in/expansion I/O) 10/16-point 24-point 48-point	 5 W 8 W 11 W
Plug-in modules, each	1.44 W
Expansion I/O (system bus power consumption)	2085-IQ16 – 0.85 W 2085-IQ32T – 0.95 W 2085-IA8 – 0.75 W 2085-IM8 – 0.75 W 2085-OA8 – 0.90 W 2085-OB16 – 1.00 W 2085-OV16 – 1.00 W 2085-OW8 – 1.80 W 2085-OW16 – 3.20 W 2085-IF4 – 1.70 W 2085-IF8 – 1.75 W 2085-OF4 – 3.70 W 2085-IRT4 – 2.00 W

(1) When setting up a Micro800 system, verify that total power consumption of the controller, plug-in and expansion I/O does not exceed the output power capacity of the power supply used. See External Power Supply (2080-PS120-240VAC) on page 59 for power supply specifications.

(2) Micro820 controllers require a maximum of 8.5 W with plug-ins.

Number and Types of Inputs/Outputs

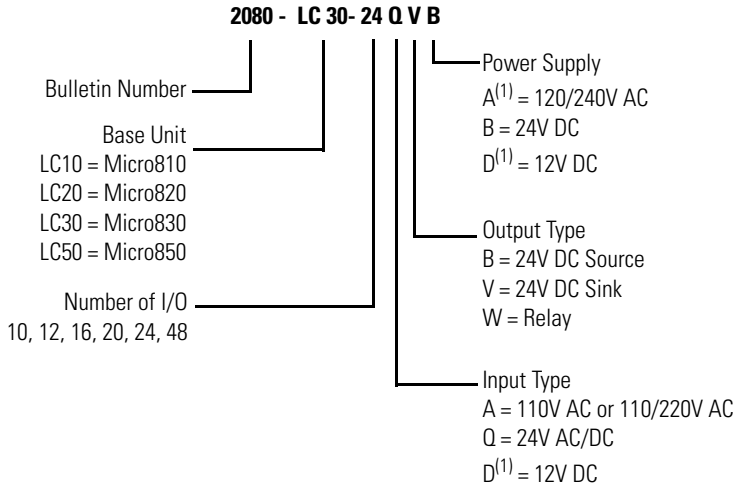
Number and Types of Inputs/Outputs for Micro810, Micro820, Micro830, and Micro850 Catalogs

Controller Family	Catalogs	Inputs				Outputs			Analog Out 0…10V DC	Analog In 0…10V (shared with DC In)	PTO/PWM Support[1]	Embedded HSC Support[2]
		120V AC	120 / 240V AC	24V DC/ V AC	12V DC	Relay	24V DC Source	24V DC Sink				
Micro810	2080-LC10-12QWB	–	–	8	–	4	–	–	–	4	–	–
	2080-LC10-12AWA	–	8	–	–	4	–	–	–	–	–	–
	2080-LC10-12QBB	–	–	8	–		4	–	–	4	–	–
	2080-LC10-12DWD	–	–	–	8	4	–	–	–	4	–	–
Micro820	2080-LC20-20QBB	–	–	12	–		7	–	1	4	1 (PWM)	–
	2080-LC20-20QWB	–	–	12	–	7	–	–	1	4	–	–
	2080-LC20-20AWB	8	–	4	–	7	–	–	1	4	–	–
	2080-LC20-20QBBR	–	–	12	–	–	7	–	1	4	1 (PWM)	–
	2080-LC20-20QWBR	–	–	12	–	7	–	–	1	4	–	–
	2080-LC20-20AWBR	8	–	4	–	7	–	–	1	4	–	–
Micro830	2080-LC30-10QWB	–	–	6	–	4	–	–	–	–	–	2
	2080-LC30-10QVB	–	–	6	–	–	–	4	–	–	1 (PTO/PWM)	2
	2080-LC30-16AWB	10	–	–	–	6	–	–	–	–	–	–
	2080-LC30-16QWB	–	–	10	–	6	–	–	–	–	–	2
	2080-LC30-16QVB	–	–	10	–	–	–	6	–	–	1 (PTO/PWM)	2
	2080-LC30-24QWB	–	–	14	–	10	–	–	–	–		4
	2080-LC30-24QVB	–	–	14	–	–	–	10	–	–	2 (PTO/PWM)	4
	2080-LC30-24QBB	–	–	14	–	–	10	–	–	–	2 (PTO/PWM)	4
	2080-LC30-48AWB	28	–	–	–	20	–	–	–	–	–	–
	2080-LC30-48QWB	–	–	28	–	20	–	–	–	–	–	6
	2080-LC30-48QVB	–	–	28	–	–	–	20	–	–	3 (PTO/PWM)	6
	2080-LC30-48QBB	–	–	28	–	–	20	–	–	–	3 (PTO/PWM)	6
Micro850	2080-LC50-24AWB	14	–	–	–	10	–	–	–	–		
	2080-LC50-24QBB	–	–	14	–	–	10	–	–	–	2 (PTO/PWM)	4
	2080-LC50-24QVB	–	–	14	–	–	–	10	–	–	2 (PTO/PWM)	4
	2080-LC50-24QWB	–	–	14	–	10	–	–	–	–		4
	2080-LC50-48AWB	28	–	–	–	20	–	–	–	–	–	–
	2080-LC50-48QWB	–	–	28	–	20	–	–	–	–	–	6
	2080-LC50-48QBB	–	–	28	–	–	20	–	–	–	3 (PTO/PWM)	6
	2080-LC50-48QVB	–	–	28	–	–	–	20	–	–	3 (PTO/PWM)	6

(1) For Micro830 and Micro850, you need firmware revision 6.011 or later to use PWM output.

(2) Maximum number of embedded HSC supported.

Micro800 Catalog Number Details



(1) Available for Micro810 only.

Connected Components Workbench Software

Connected Components Workbench™ is the programming and configuration software environment for the Micro800 controllers and our Connected Components products offering. It simplifies setup and usage, enabling applications ranging from simple Smart Relay up to Standalone Machine control.

Visit the website for the most up-to-date product information, downloads and tools:
http://ab.rockwellautomation.com/Programmable-Controllers/Connected-Components-Workbench-Software.

Standard Edition

Attribute	Basic
Delivery	Download Connected Components Workbench Standard Edition for FREE at http://ab.rockwellautomation.com/Programmable-Controllers/Connected-Components-Workbench-Software.
Packaging options	Available on DVD, orderable from Connected Components Workbench web page at http://ab.rockwellautomation.com/Programmable-Controllers/Connected-Components-Workbench-Software.
Features	• LD, FBD and ST editors • user-defined function blocks • No activation needed • Optional registration during installation (for product updates and notices)

Developer Edition

The Developer Edition offers the following additional programming features:

User-defined Structures

- You can combine different data types to create structures and then assign them to user-defined variables.
- Structures are useful when you want a single variable to hold several related pieces of information. For example, you might want to define a structure to keep temperature ranges and alarm levels for a device rather than creating multiple variables.

Spy Lists

You can define spy lists to monitor changes in variables and function block instances in Connected Components Workbench programs.

The Developer Edition installs the following additional software:

- FactoryTalk® Activation Manager v3.60.00 (CPR 9 SR 6)
- FactoryTalk Diagnostics v2.60.00 (CPR 9 SR 6)
- Microsoft Help Viewer 1.1

Note: The Developer Edition requires an activation key. See the FactoryTalk Activation help for additional information on activating Rockwell Automation software products.

Select a Micro810 Controller

As the smallest of the Micro800 family, the Micro810 controller is available in a 12-point version, with two 8 A and two 4 A outputs that eliminate the need for external relays. The Micro810 features embedded smart relay function blocks that can be configured from a 1.5" LCD and keypad. The function blocks include Delay OFF/ON Timer, Time of Day, Time of Week and Time of Year for applications requiring a programmable timer and lighting control. Programming can also be done through a program download via USB programming port, using Connected Components Workbench Software.

To help you select a Micro810 controller, consult the specifications for each catalog in the next section.

Number and Types of Inputs/Outputs

Catalog Number	Power	Inputs			Outputs		Analog In 0…10V (shared with DC In)	
		120V AC	240V AC	12…24V DC /V AC	Relay	24 V DC SRC		
2080-LC10-12QWB	24V DC			8	4		4	
2080-LC10-12AWA	120…240V AC	8			4			
2080-LC10-12QBB	12…24V DC			8		4	4	
2080-LC10-12DWD	12V DC			8	4		4	

Specifications[1]

Attribute	2080-LC10-12AWA	2080-LC10-12QWB	2080-LC10-12DWD	2080-LC10-12QBB
Number of I/O	8 Input (4 digital, 4 analog/digital, configurable) 4 Output			
Dimensions HxWxD	91 x 75 x 59 mm (3.58 x 2.95 x 2.32 in.)			
Supply voltage range	85…263V DC	20.4…26.4V DC	10.8V…13.2V DC	11.4V..26.4V DC
Supply frequency range (AC supply)	47…63 Hz	–		
Voltage range	100…240V AC, 50/60 Hz	24V DC Class 2	12V DC Class 2	12/24V DC Class 2
Power consumption	5V A	3 W		
I/O rating	Input: 120…240V AC	Input: 24V DC, 8 mA	Input: 12V DC, 8 mA	Input: 24V DC, 8 mA
	Output: Relay 00 & 01: 8 A @ 240V AC, B300, R300, General Use Relay 02 & 03: 4 A @ 240V AC, C300, R150, General Use			Output: 24V DC 1A, 25 °C, 24V DC 0.5A 55 °C
Operating temperature	0…55 °C (32…131 °F)			
Shipping weight, approx.	0.203 kg (0.448 lb)			
Wire size	0.32...2.1 mm² (22...14 AWG) solid copper wire or 0.32...1.3 mm² (22...16 AWG) stranded copper wire rated @ 90 °C (194 °F) insulation max.			
Wiring category	2 – on signal ports 2 – on power ports			
Wiring torque	1.085 Nm (8 lb-in.)			
Wire type	use Copper Conductors only			
Fuse, type	Rated 250V 3.15 A-RADIAL			
Enclosure type rating	Meets IP20			
North American temp code	T5			
Insulation stripping length	7 mm (0.28 in.)			
Isolation voltage	250V (continuous), Reinforced Insulation Type, I/O to Aux and Network, Inputs to Outputs. Type tested for 60 s 3250V DC, I/O to Aux and Network, Inputs to Outputs	250V (continuous), Reinforced Insulation Type, I/O to Aux and Network, Inputs to Outputs Type tested for 60 s @ 720V DC, Inputs to Aux and Network, 3250V DC Outputs to Aux and Network, Inputs to Outputs		50V (continuous), Reinforced Insulation Type, I/O to Aux and Network, Inputs to Outputs Type tested for 60 s @ 720V DC, I/O to Aux and Network, Inputs to Outputs
AC input filter setting	16 ms for all embedded inputs (In Connected Components Workbench, go to the Embedded I/O configuration window to re-configure the filter setting for each input group)			

(1) See the Micro810 User Manual, publication 2080-UM001, for more Micro810 controller specifications.

Environmental

Attribute	Value
Temperature, operating	IEC 60068-2-1 (Test Ad, Operating Cold), IEC 60068-2-2 (Test Bd, Operating Dry Heat), IEC 60068-2-14 (Test Nb, Operating Thermal Shock): 0…55 °C (32…131 °F)
Temperature, surrounding air, max	55 °C (131 °F)
Temperature, storage	IEC 60068-2-1 (Test Ab, Unpackaged Non-operating Cold), IEC 60068-2-2 (Test Bb, Unpackaged Non-operating Dry Heat), IEC 60068-2-14 (Test Na, Unpackaged Non-operating Thermal Shock): -40…85 °C (-40…185 °F)
Relative humidity	IEC 60068-2-30 (Test Db, Unpackaged Damp Heat): 5...95% non-condensing
Vibration	IEC 60068-2-6 (Test Fc, Operating): 2 g @ 10…500 Hz
Shock, operating	IEC 60068-2-27 (Test Ea, Unpackaged Shock): 30 g
Shock, nonoperating	IEC 60068-2-27 (Test Ea, Unpackaged Shock): 30 g (DIN Rail Mounted) 30 g (Panel Mounted)
Emissions	CISPR 11 Group 1, Class A
ESD immunity	IEC 61000-4-2: 4 kV contact discharges 8 kV air discharges
Radiated RF immunity	IEC 61000-4-3: 10V/m with 1 kHz sine-wave 80% AM from 80…2000 MHz 10V/m with 200 Hz 50% Pulse 100% AM @ 900 MHz 10V/m with 200 Hz 50% Pulse 100% AM @ 1890 MHz 3V/m with 1 kHz sine-wave 80% AM from 2000…2700 MHz
EFT/B immunity	IEC 61000-4-4: ±2 kV @ 5 kHz on power ports ±2 kV @ 5 kHz on signal ports
Surge transient immunity	IEC 61000-4-5: ±1 kV line-line(DM) and ±2 kV line-earth(CM) on power ports ±1 kV line-line(DM) and ±2 kV line-earth(CM) on signal ports ±2 kV line-earth(CM) on shielded ports
Conducted RF immunity	IEC 61000-4-6: 10V rms with 1 kHz sine-wave 80% AM from 150 kHz…80 MHz
Voltage variation	IEC 61000-4-11: 60% dip for 5 and 50 periods on AC supply ports 30% dip for 0.5 period at 0° and 180° on AC supply ports 100% dip for 0.5 period at 0° and 180° on AC supply ports ±10% fluctuations for 15 min on AC supply ports > 95% interruptions for 250 periods on AC supply ports

Certifications

Certification (when product is marked)(1)	Value
c-UL-us	UL Listed Industrial Control Equipment, certified for US and Canada. See UL File E322657. UL Listed for Class I, Division 2 Group A,B,C,D Hazardous Locations, certified for U.S. and Canada. See UL File E334470.
CE	European Union 2004/108/EC EMC Directive, compliant with: EN 61000-6-2; Industrial Immunity EN 61000-6-4; Industrial Emissions EN 61131-2; Programmable Controllers (Clause 8, Zone A & B) EN 61131-2; Programmable Controllers (Clause 11)
C-Tick	Australian Radiocommunications Act, compliant with: AS/NZS CISPR 11; Industrial Emissions

(1) See the Product Certification link at http://www.rockwellautomation.com/products/certification/ for Declaration of Conformity, Certificates, and other certification details.

For relay life chart, see the Specifications section of the Micro810 User Manual, publication 2080-UM001.

DeviceNet (2080-DNET20)

Specifications (2080-DNET20)

DeviceNet Communication Rate, max	DeviceNet current	Wire size
125 Kbps – 420 m (1378 ft.) 250 Kbps – 200 m (656 ft.) 500 Kbps – 75 m (246 ft.)	24V DC, 300 mA Class 2	0.25... 2.5 mm^2 (22...14 AWG) solid or stranded copper wire rated @ 75 °C (167 °F), or greater, 1.2 mm (3/64 in.) insulation max

Network protocol	Backplane power consumption	Power dissipation	Number of nodes, max
I/O Slave Messaging: Poll Command	50 mA @ 24V DC	1.44 W	20 nodes for I/O operation

High Speed Counter (2080-MOT-HSC)

Specifications (2080-MOT-HSC)

Input Frequency, max	Wire size	Number of inputs
250 kHz (50% duty)	**Solid**: 0.14…1.5 mm^2 (26…16 AWG) **Stranded**: 0.14…1.0 mm^2 (26…18 AWG) rated @ 90 °C (194 °F) insulation max	1 Quadrature (ABZ) differential input

Input impedance	Pulse width, min	All supply power and/or current ratings	Isolation voltage
3580 Ω	2 µs	Input/Output: 24V DC	Input module: 50V (continuous), Basic Insulation Type, Inputs/Outputs to Backplane. Type tested for 60s @ 720V DC, Inputs/Outputs to Backplane

Micro800 Accessories

Micro810 LCD (2080-LCD)

Operating temperature	Temperature, surrounding air, max	Temperature, nonoperating	North American temp code
-20..55 °C (-4…131 °F)	55 °C (131 °F)	-40...85 °C (-40…185 °F)	T5

Micro810 USB Adapter (2080-USBADAPTER)

USB cable connector type	Temperature, operating	Temperature, surrounding air, max	Temperature, non-operating	North American temp code
USB Type A-B Male-Male	-20…55 °C (-4…131 °F)	55 °C (131 °F)	-40…85 °C (-40…185 °F)	T5

External Power Supply (2080-PS120-240VAC)

Attribute	Value
Dimensions, HxWxD	90 x 45 x 80 mm (3.55 x 1.78 x 3.15 in)
Shipping weight	0.34 kg (0.75 lb)
Supply voltage range(1)	100V…120V AC, 1A 200…240V AC, 0.5A
Supply frequency	47…63 Hz
Supply power	24V DC, 1.6 A
Inrush current, max	24 A @ 132V for 10 ms 40 A @ 263V for 10 ms
Power consumption(2) (Output power)	38.4 W @ 100V AC, 38.4 W @ 240V AC
Power dissipation (Input power)	45.1 W @ 100V AC, 44.0W @ 240V AC
Isolation voltage	250V (continuous), Primary to Secondary: Reinforced Insulation Type Type tested for 60s @ 2300V AC primary to secondary and 1480V AC primary to earth ground.
Output ratings	24V DC, 1.6 A, 38.4 W max.

(1) Any fluctuation in voltage source must be within 85V...264V. Do not connect the adapter to a power source that has fluctuations outside of this range.

(2) When setting up a Micro800 system, verify that total power consumption of the controller, plug-in and expansion I/O does not exceed the output power capacity of the power supply used.

Remote LCD (2080-REMLCD)

Attribute	Value
Dimensions, HxWxD	97 x 130 x 35.5 mm (3.82 x 5.12 x 1.40 in.)
Display type	192 x 64 pixel monochrome
Display size	48 x 106.5 mm (1.89 x 4.19 in.)
Backlight	25000 hrs @ 25 °C LED; tricolor backlight (RGB)
Operator input	Tactile keys (function keys, arrow keys, ESC and OK keys)
Programming port	USB to serial converter for programming the controller
Input supply voltage	12V/24V DC (±10%)
Input supply current, max	90 mA @ 12V and 60 mA @ 24V
Power consumption, max	1.5 W
Weight, approx.	405 g (0.89 lb) – includes packaging weight
Wire size	Single-wire gauge: 0.14…1.5 mm^2 (26…16 AWG) rated @ 90 °C (194 °F) Dual-wire gauge: 0.14…0.75 mm^2 (26…18 AWG) rated @ 90 °C (194 °F)
Wire type	Copper
Wiring category(1)	3 – on power ports; 3 – on communication port
Enclosure type ratings	Meets IP65 (when front panel mounted)
North American temp code	T4

(1) Use this conductor category information.

For More Information

Visit the Micro800 website at http://ab.rockwellautomation.com/Programmable-Controllers/Micro800 to learn more about Micro800 products and download Connected Component Workbench software and Micro800 firmware updates.

If you would like a manual, you can:

- download a free electronic version from the Internet: http://rockwellautomation.com/literature.
- purchase a printed manual by contacting your local Allen-Bradley distributor or Rockwell Automation representative.

You can also visit the following websites for additional technical information:

- **Sample Code Library**
  http://samplecode.rockwellautomation.com/idc/groups/public/documents/webassets/sc_home_page.hcst
- **Technical Forums**
  http://www.rockwellautomation.com/forums/
- **Connected Component Accelerator Toolkit**
  http://www.rockwellautomation.com/components/connected/ccat.html

Additional Resources

These documents contain additional information concerning related Rockwell Automation products.

Resource	Description
Micro810 Programmable Controllers User Manual, publication 2080-UM001	A more detailed description of how to install and use your Micro810 programmable controller.
Micro820 Programmable Controllers User Manual, publication 2080-UM005	A more detailed description of how to install and use your Micro820 programmable controllers.
Micro830 and Micro850 Programmable Controllers User Manual, publication 2080-UM002	A more detailed description of how to install and use your Micro830 and Micro850 programmable controller.
Micro800 Plug-in Modules User Manual, publication 2080-UM004	Description of features, installation, wiring, and specifications for the Micro800 plug-in modules.
Micro800 Discrete and Analog Expansion I/O Modules User Manual, publication 2080-UM003	Description of features, installation, wiring, and specifications for the Micro800 expansion I/O modules and accessories.
Industrial Automation Wiring and Grounding Guidelines, publication 1770-4.1	Provides general guidelines for installing a Rockwell Automation industrial system.
Product Certifications website, http://www.rockwellautomation.com/products/certification/	Provides declarations of conformity, certificates, and other certification details.