Micro820™ Programmable Logic Controller

Allen-Bradley

Bulletin 2080 Product Profile

Features and Benefits

- Features optimized for small standalone machines and remote automation projects
- EtherNet/IP™ for Connected Components Workbench™ programming, RTU applications and HMI connectivity
- Built-in Real Time Clock (RTC) with no battery required
- microSD™ slot for program transfer, datalog and recipe
- Selected models available with removable terminal blocks for easier wiring and installation
- 5 KHz PWM Output for controlling solenoids and valves

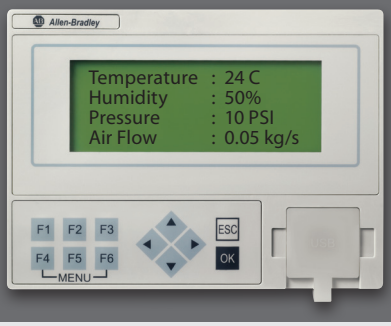
The new Allen-Bradley Micro820 20pt controller is specifically designed for small standalone machines and remote automation projects with embedded Ethernet and Serial ports. It can function as a RTU (remote terminal unit) for remote machines with support for Modbus RTU and TCP. It has embedded support for 4 thermistor temperature inputs for use as a DDC (direct digital controller) for Building Management Systems.

The Micro820 supports an embedded microSD slot that can be used for storing large amounts of data that normally cannot fit into memory for applications that require datalog and recipe. All files are stored in CSV text format for easy viewing and editing. The microSD card is also used for backing up and restoring the program, which can be used for duplicating the program in several machines.

The Allen-Bradley Micro800 Remote LCD Display connects to the controller's embedded RS232 port and works as an essential accessory for the Micro820 controller. With 4 or 8 lines of ASCII text and a tactile keypad, it can be used as a simple HMI. Its system menu is available in multiple languages for direct viewing and editing of controller variables. Controller's Ethernet address can also be easily set from the menu. Supports front panel mounting as well as DIN rail mounting next to the controller.

Micro800 Remote LCD Display

- *USB port for program download to controller*
- *IP65 for front panel mount*
- *Configurable start-up screen*



*Readings on LCD Display are for illustration purposes only, not actual readings.

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Bulletin 2080

Catalog Number	Inputs			Outputs		
	120V AC	24V DC/ V AC	Analog 0-10V (shared with 24V DC)	Relay	24V DC SRC	Analog 0-10V
2080-LC20-20QWB(R)	-	12	4	7	-	1
2080-LC20-20QBB(R)	-	12	4	-	7	1
2080-LC20-20AWB(R)	8	4	4	7	-	1

Removable terminal blocks are available on modules with catalog numbers that end in R. Catalog numbers that do not end in R have fixed terminal blocks.

Micro820	20-pt QWB(R)	20-pt QBB(R)	20-pt AWB(R)
Base Unit			
Power Supply	Base Unit has embedded 24V DC Power Supply. Optional External 120/240V AC via Cat. No. 2080-PS120-240VAC		
Base Programming Port	Embedded Ethernet Port		
Base EtherNet/IP™ port	EtherNet/IP Class 3, Modbus TCP		
Base Serial Port	RS232/485 non-isolated, CIP Serial, Modbus RTU, ASCII		
Plug-in Slots	2		
10V Output for Thermistors	1 Output Reference (supports up to four 10k thermistors)		
PWM Output	5 KHz		
microSD Card Slot	1		
Supported microSD Card Formats	FAT32/16		
microSD Card Size, Max	32GB		
microSD Card Class Speed	Class 6 and 10 SDSC and SDHC		
I/O			
Digital I/O (In/Out)	12/7 (4 Inputs shared with Analog Inputs)		
Analog I/O Channels	4/1		
Progamming			
Software	Connected Components Workbench		
Program Steps (or instructions)	10Ksteps		
Data (bytes)	20Kbytes (up to 400bytes non-volatile)		
IEC 61131-3 Languages	Ladder Diagram, Function Block, Structured Text		
User Defined Function Blocks	Yes		
Motion Instructions	No PTO motion supported		
Floating Point Math	32-bit and 64-bit		
PID Loop Control	Yes		
Environments			
Certifications	c-UL-us CL1DIV2, CE, C-Tick, KC		
Temperature Range (Controller)	-20°…65°C		
Dimensions (HxWxD, mm)	90x100x80		

LCD Display	
Communications	
Embedded Serial Port	RS232 (connects to Controller's Embedded RS232 port)
Embedded USB Port	Controller programming port (USB to Serial pass-through)
Environmentals	
Temperature Range (LCD Display)	0°…50°C
Dimensions (HxWxD, mm)	97x130x36

Catalog Number	Plug-in Modules
2080-IQ4	4-pt Digital Input, 12/24VDC, Sink/Source, Type3
2080-OB4	4-pt Digital Output, 12/24VDC, Source
2080-OV4	4-pt Digital Output, 12/24VDC, Sink
2080-OW4I	4-pt Relay Output, Individually Isolated, 2A
2080-IQ4OB4	8-pt Combo: 4-pt Digital Input, 12/24VDC, Sink/Source, Type3, and 4-pt Digital Output, 12/24VDC, Source
2080-IQ4OV4	8-pt Combo: 4-pt Digital Input, 12/24VDC, Sink/Source, Type3, and 4-pt Digital Output, 12/24VDC, Sink
2080-IF2, 2080-IF4	2/4-ch Analog Input, 0-20 mA, 0-10V, non-isolated 12-bit
2080-OF2	2-ch Analog Output 0-20 mA, 0-10V, non-isolated 12-bit
2080-SERIALISOL	RS232/485 isolated serial port
2080-TRIMPOT6	6-ch Trimpot Analog Input
2080-RTD2	2-ch RTD, non-isolated, ±1.0 °C
2080-TC2	2-ch TC, non-isolated, ±1.0 °C
2080-MOT-HSC	High Speed Counter, 250kHz, Differential Line Receiver, 1 Digital Output
2080-DNET20	DeviceNet Scanner, 20 Nodes
Catalog Number	**Accessories**
2080-PS120-240VAC	External 120/240V AC power supply
2080-REMLCD	Remote 3.5 in. LCD Display, 24V DC Power, 4 or 8 lines ASCII text

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